

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

HONO'ULI'ULI WWTP

JOB NUMBER

410-163791-1

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
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Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Qualifiers

HPLC/IC

| Qualifier | Qualifier Description |
|-----------|---|
| H | Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. |
| H3 | Sample was received and analyzed past holding time. This does not meet regulatory requirements. |

LCMS

| Qualifier | Qualifier Description |
|-----------|--|
| cn | Refer to Case Narrative for further detail |
| H | Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements. |
| H3 | Sample was received and analyzed past holding time. This does not meet regulatory requirements. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

Case Narrative

Client: Tetra Tech, Inc.
Project: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Job ID: 410-163791-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-163791-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 3/13/2024 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C.

Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody. The field sampler is Roger Brewer.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): HNWWTP-EFFL-EB (410-163791-3) and HNWWTP-INFL-EB (410-163791-4). The container labels list collection time as 07:30, while the COC lists 07:10. As per client, the sample collection time listed on the COC is correct.

The Chain-of-Custody (COC) was incomplete as received. The COC is missing the Sample Preservation, Number of containers per sample, Sample Type (Grab or Composite) and State of Origin. This does not meet regulatory requirements. As per client on 03/14, Preservation by freezing only. Original containers (noted on COC): Two 500ml, three 125ml and two 60 ml. 24-hour "composite" sample collected in Hawaii. Use the sample collection time on the COCs.

MBL is defined as the second method blank after the final sample and prior to the closing calibration verification standard (CCV).

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

PFAS

Method 1621_Plug2: The breakthrough for sample HNWWTP-EFFL-EB (410-163791-3) and HNWWTP-INFL-EB (410-163791-4) is 0 %. The method requirement is <50%.

Method 1621_Plug2: The breakthrough for sample HNWWTP-EFFL (410-163791-1) is 0%. The method requirement is <50%.

Method 1621_Plug2: The breakthrough for sample HNWWTP-INFL (410-163791-2) is 0%. The method requirement is <50%.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Client Sample ID: HNWWTP-EFFL

Lab Sample ID: 410-163791-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------------------------------|--------|-----------|-----|-----|------|---------|---|-------------|-----------|
| Adsorbable Organic Fluorine (AOF) | 1.9 | J H H3 | 2.0 | 1.0 | ug/L | 1 | | 1621 Plug 1 | Total/NA |
| Adsorbable Organic Fluorine (AOF) | 1.9 | J | 2.0 | 1.0 | ug/L | 1 | | 1621 Sum | Total/NA |
| Total Suspended Solids | 60 | | 3.0 | 3.0 | mg/L | 1 | | 1621 | Total/NA |

Client Sample ID: HNWWTP-INFL

Lab Sample ID: 410-163791-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|-----------------------------------|--------|-----------|-----|-----|------|---------|---|-------------|-----------|
| Adsorbable Organic Fluorine (AOF) | 1.5 | J H H3 | 2.0 | 1.0 | ug/L | 1 | | 1621 Plug 1 | Total/NA |
| Adsorbable Organic Fluorine (AOF) | 1.5 | J | 2.0 | 1.0 | ug/L | 1 | | 1621 Sum | Total/NA |
| Total Suspended Solids | 75 | | 3.0 | 3.0 | mg/L | 1 | | 1621 | Total/NA |

Client Sample ID: HNWWTP-EFFL-EB

Lab Sample ID: 410-163791-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|-----|------|---------|---|--------|-----------|
| Total Suspended Solids | 5.0 | | 3.0 | 3.0 | mg/L | 1 | | 1621 | Total/NA |

Client Sample ID: HNWWTP-INFL-EB

Lab Sample ID: 410-163791-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|-----|------|---------|---|--------|-----------|
| Total Suspended Solids | 5.0 | | 3.0 | 3.0 | mg/L | 1 | | 1621 | Total/NA |

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Client Sample ID: HNWWTP-EFFL

Lab Sample ID: 410-163791-1

Date Collected: 09/19/23 07:54

Matrix: Water

Date Received: 03/13/24 09:40

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Fluoride ion | <0.45 | H H3 | 1.0 | 0.45 | mg/L | | | 03/18/24 15:35 | 5 |

Method: EPA 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | 1.9 | J H H3 | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/29/24 14:21 | 1 |

Method: EPA 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | H H3 cn | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/29/24 14:52 | 1 |

Method: EPA 1621 Sum - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | 1.9 | J | 2.0 | 1.0 | ug/L | | | 04/02/24 11:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids (EPA 1621) | 60 | | 3.0 | 3.0 | mg/L | | | 03/18/24 11:03 | 1 |

Client Sample ID: HNWWTP-INFL

Lab Sample ID: 410-163791-2

Date Collected: 09/19/23 07:37

Matrix: Water

Date Received: 03/13/24 09:40

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Fluoride ion | <0.45 | H H3 | 1.0 | 0.45 | mg/L | | | 03/18/24 15:47 | 5 |

Method: EPA 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | 1.5 | J H H3 | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/31/24 16:19 | 1 |

Method: EPA 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | H H3 cn | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/31/24 16:50 | 1 |

Method: EPA 1621 Sum - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | 1.5 | J | 2.0 | 1.0 | ug/L | | | 04/02/24 11:37 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids (EPA 1621) | 75 | | 3.0 | 3.0 | mg/L | | | 03/18/24 11:03 | 1 |

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Client Sample ID: HNWWTP-EFFL-EB

Lab Sample ID: 410-163791-3

Date Collected: 09/18/23 07:10

Matrix: Water

Date Received: 03/13/24 09:40

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Fluoride ion | <0.090 | H H3 | 0.20 | 0.090 | mg/L | - | | 03/18/24 14:47 | 1 |

Method: EPA 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.78 | H H3 | 1.6 | 0.78 | ug/L | - | 03/27/24 09:59 | 03/28/24 20:50 | 1 |

Method: EPA 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.78 | H H3 cn | 1.6 | 0.78 | ug/L | - | 03/27/24 09:59 | 03/28/24 21:21 | 1 |

Method: EPA 1621 Sum - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.78 | | 1.6 | 0.78 | ug/L | - | | 04/01/24 07:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids (EPA 1621) | 5.0 | | 3.0 | 3.0 | mg/L | - | | 03/18/24 11:03 | 1 |

Client Sample ID: HNWWTP-INFL-EB

Lab Sample ID: 410-163791-4

Date Collected: 09/18/23 07:13

Matrix: Water

Date Received: 03/13/24 09:40

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------|-----------|------|-------|------|---|----------|----------------|---------|
| Fluoride ion | <0.090 | H H3 | 0.20 | 0.090 | mg/L | - | | 03/18/24 16:11 | 1 |

Method: EPA 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.84 | H H3 | 1.7 | 0.84 | ug/L | - | 03/27/24 09:59 | 03/28/24 21:52 | 1 |

Method: EPA 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.84 | H H3 cn | 1.7 | 0.84 | ug/L | - | 03/27/24 09:59 | 03/28/24 22:23 | 1 |

Method: EPA 1621 Sum - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <0.84 | | 1.7 | 0.84 | ug/L | - | | 04/01/24 07:34 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------|-----------|-----|-----|------|---|----------|----------------|---------|
| Total Suspended Solids (EPA 1621) | 5.0 | | 3.0 | 3.0 | mg/L | - | | 03/18/24 11:03 | 1 |

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-484414/5

Matrix: Water

Analysis Batch: 484414

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|--------------|--------------|-----------------|------|-------|------|---|----------|----------------|---------|
| Fluoride ion | <0.090 | | 0.20 | 0.090 | mg/L | | | 03/18/24 10:03 | 1 |

Lab Sample ID: LCS 410-484414/3

Matrix: Water

Analysis Batch: 484414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|--------------|----------------|---------------|------------------|------|---|------|----------------|
| Fluoride ion | 0.750 | 0.685 | | mg/L | | 91 | 90 - 110 |

Lab Sample ID: LCSD 410-484414/4

Matrix: Water

Analysis Batch: 484414

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|--------------|----------------|----------------|-------------------|------|---|------|----------------|-----|--------------|
| Fluoride ion | 0.750 | 0.727 | | mg/L | | 97 | 90 - 110 | 6 | 20 |

Method: 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

Lab Sample ID: MB 410-487635/1-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 487635

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|--------------|-----------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/27/24 09:55 | 03/28/24 17:45 | 1 |

Lab Sample ID: MBL 410-487635/27-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 487635

| Analyte | MBL Result | MBL Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|---------------|------------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/27/24 10:01 | 03/29/24 08:41 | 1 |

Lab Sample ID: LCS 410-487635/3-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 487635

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------------|----------------|---------------|------------------|------|---|------|----------------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | 23 | | ug/L | | 92 | 70 - 130 |

Lab Sample ID: LCSD 410-487635/5-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 487635

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-----------------------------------|----------------|----------------|-------------------|------|---|------|----------------|-----|--------------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | 23 | | ug/L | | 91 | 70 - 130 | 1 | 20 |

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Method: 1621 Plug 1 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography (Continued)

Lab Sample ID: MB 410-488555/1-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488555

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/29/24 11:16 | 1 |

Lab Sample ID: MBL 410-488555/27-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488555

| Analyte | MBL Result | MBL Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|------------|---------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 04/01/24 06:45 | 1 |

Lab Sample ID: LCS 410-488555/3-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488555

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | 23.0 | | ug/L | | 93 | 70 - 130 |

Lab Sample ID: LCSD 410-488555/5-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 488555

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-----------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | 22.5 | | ug/L | | 91 | 70 - 130 | 2 | 20 |

Method: 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography

Lab Sample ID: MB 410-487635/2-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487635

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/27/24 09:55 | 03/28/24 18:16 | 1 |

Lab Sample ID: MBL 410-487635/28-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487635

| Analyte | MBL Result | MBL Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|------------|---------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/27/24 10:01 | 03/29/24 09:12 | 1 |

Lab Sample ID: LCS 410-487635/4-A
Matrix: Water
Analysis Batch: 488604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487635

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | <1.0 | | ug/L | | 3 | 0 - 50 |

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Method: 1621 Plug2 - Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography (Continued)

Lab Sample ID: LCSD 410-487635/6-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 487635

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-----------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | <1.0 | | ug/L | | 1 | 0 - 50 | 64 | 200 |

Lab Sample ID: MB 410-488555/2-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 488555

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|-----------|--------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 03/29/24 11:47 | 1 |

Lab Sample ID: MBL 410-488555/28-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 488555

| Analyte | MBL Result | MBL Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-----------------------------------|------------|---------------|-----|-----|------|---|----------------|----------------|---------|
| Adsorbable Organic Fluorine (AOF) | <1.0 | | 2.0 | 1.0 | ug/L | | 03/29/24 09:39 | 04/01/24 07:16 | 1 |

Lab Sample ID: LCS 410-488555/4-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 488555

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|-----------------------------------|-------------|------------|---------------|------|---|------|-------------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | <1.0 | | ug/L | | 2 | 0 - 50 |

Lab Sample ID: LCSD 410-488555/6-A

Matrix: Water

Analysis Batch: 488604

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 488555

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|-----------------------------------|-------------|-------------|----------------|------|---|------|-------------|-----|-----------|
| Adsorbable Organic Fluorine (AOF) | 24.9 | <1.0 | | ug/L | | 2 | 0 - 50 | 9 | 200 |

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

HPLC/IC

Analysis Batch: 484414

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------------|-----------|--------|----------------|------------|
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | EPA 300.0 R2.1 | |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | EPA 300.0 R2.1 | |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | EPA 300.0 R2.1 | |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | EPA 300.0 R2.1 | |
| MB 410-484414/5 | Method Blank | Total/NA | Water | EPA 300.0 R2.1 | |
| LCS 410-484414/3 | Lab Control Sample | Total/NA | Water | EPA 300.0 R2.1 | |
| LCSD 410-484414/4 | Lab Control Sample Dup | Total/NA | Water | EPA 300.0 R2.1 | |

LCMS

Prep Batch: 487635

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-----------|------------|
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 Prep | |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 Prep | |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 Prep | |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 Prep | |
| MB 410-487635/1-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MB 410-487635/2-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MBL 410-487635/27-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MBL 410-487635/28-A | Method Blank | Total/NA | Water | 1621 Prep | |
| LCS 410-487635/3-A | Lab Control Sample | Total/NA | Water | 1621 Prep | |
| LCS 410-487635/4-A | Lab Control Sample | Total/NA | Water | 1621 Prep | |
| LCSD 410-487635/5-A | Lab Control Sample Dup | Total/NA | Water | 1621 Prep | |
| LCSD 410-487635/6-A | Lab Control Sample Dup | Total/NA | Water | 1621 Prep | |

Prep Batch: 488555

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-----------|------------|
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 Prep | |
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 Prep | |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 Prep | |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 Prep | |
| MB 410-488555/1-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MB 410-488555/2-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MBL 410-488555/27-A | Method Blank | Total/NA | Water | 1621 Prep | |
| MBL 410-488555/28-A | Method Blank | Total/NA | Water | 1621 Prep | |
| LCS 410-488555/3-A | Lab Control Sample | Total/NA | Water | 1621 Prep | |
| LCS 410-488555/4-A | Lab Control Sample | Total/NA | Water | 1621 Prep | |
| LCSD 410-488555/5-A | Lab Control Sample Dup | Total/NA | Water | 1621 Prep | |
| LCSD 410-488555/6-A | Lab Control Sample Dup | Total/NA | Water | 1621 Prep | |

Analysis Batch: 488604

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|-------------------|------------------|-----------|--------|-------------|------------|
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 Plug 1 | 488555 |
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 Plug2 | 488555 |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 Plug 1 | 488555 |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 Plug2 | 488555 |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 Plug 1 | 487635 |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 Plug2 | 487635 |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 Plug 1 | 487635 |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 Plug2 | 487635 |
| MB 410-487635/1-A | Method Blank | Total/NA | Water | 1621 Plug 1 | 487635 |

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

LCMS (Continued)

Analysis Batch: 488604 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-------------|------------|
| MB 410-487635/2-A | Method Blank | Total/NA | Water | 1621 Plug2 | 487635 |
| MB 410-488555/1-A | Method Blank | Total/NA | Water | 1621 Plug 1 | 488555 |
| MB 410-488555/2-A | Method Blank | Total/NA | Water | 1621 Plug2 | 488555 |
| MBL 410-487635/27-A | Method Blank | Total/NA | Water | 1621 Plug 1 | 487635 |
| MBL 410-487635/28-A | Method Blank | Total/NA | Water | 1621 Plug2 | 487635 |
| MBL 410-488555/27-A | Method Blank | Total/NA | Water | 1621 Plug 1 | 488555 |
| MBL 410-488555/28-A | Method Blank | Total/NA | Water | 1621 Plug2 | 488555 |
| LCS 410-487635/3-A | Lab Control Sample | Total/NA | Water | 1621 Plug 1 | 487635 |
| LCS 410-487635/4-A | Lab Control Sample | Total/NA | Water | 1621 Plug2 | 487635 |
| LCS 410-488555/3-A | Lab Control Sample | Total/NA | Water | 1621 Plug 1 | 488555 |
| LCS 410-488555/4-A | Lab Control Sample | Total/NA | Water | 1621 Plug2 | 488555 |
| LCSD 410-487635/5-A | Lab Control Sample Dup | Total/NA | Water | 1621 Plug 1 | 487635 |
| LCSD 410-487635/6-A | Lab Control Sample Dup | Total/NA | Water | 1621 Plug2 | 487635 |
| LCSD 410-488555/5-A | Lab Control Sample Dup | Total/NA | Water | 1621 Plug 1 | 488555 |
| LCSD 410-488555/6-A | Lab Control Sample Dup | Total/NA | Water | 1621 Plug2 | 488555 |

Analysis Batch: 489005

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 Sum | |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 Sum | |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 Sum | |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 Sum | |

General Chemistry

Analysis Batch: 484302

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------|------------------|-----------|--------|--------|------------|
| 410-163791-1 | HNWWTP-EFFL | Total/NA | Water | 1621 | |
| 410-163791-2 | HNWWTP-INFL | Total/NA | Water | 1621 | |
| 410-163791-3 | HNWWTP-EFFL-EB | Total/NA | Water | 1621 | |
| 410-163791-4 | HNWWTP-INFL-EB | Total/NA | Water | 1621 | |

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Client Sample ID: HNWWTP-EFFL

Lab Sample ID: 410-163791-1

Date Collected: 09/19/23 07:54

Matrix: Water

Date Received: 03/13/24 09:40

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|----------------|-----|-----------------|--------------|---------|------|----------------------|
| Total/NA | Analysis | EPA 300.0 R2.1 | | 5 | 484414 | W7FX | ELLE | 03/18/24 15:35 |
| Total/NA | Prep | 1621 Prep | | | 488555 | QLP7 | ELLE | 03/29/24 09:39 |
| Total/NA | Analysis | 1621 Plug 1 | | 1 | 488604 | QLP7 | ELLE | 03/29/24 14:21 |
| Total/NA | Prep | 1621 Prep | | | 488555 | QLP7 | ELLE | 03/29/24 09:39 |
| Total/NA | Analysis | 1621 Plug2 | | 1 | 488604 | QLP7 | ELLE | 03/29/24 14:52 |
| Total/NA | Analysis | 1621 Sum | | 1 | 489005 | WG7O | ELLE | 04/02/24 11:37 |
| Total/NA | Analysis | 1621 | | 1 | 484302 | M98K | ELLE | 03/18/24 11:03 |

Client Sample ID: HNWWTP-INFL

Lab Sample ID: 410-163791-2

Date Collected: 09/19/23 07:37

Matrix: Water

Date Received: 03/13/24 09:40

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|----------------|-----|-----------------|--------------|---------|------|----------------------|
| Total/NA | Analysis | EPA 300.0 R2.1 | | 5 | 484414 | W7FX | ELLE | 03/18/24 15:47 |
| Total/NA | Prep | 1621 Prep | | | 488555 | QLP7 | ELLE | 03/29/24 09:39 |
| Total/NA | Analysis | 1621 Plug 1 | | 1 | 488604 | QLP7 | ELLE | 03/31/24 16:19 |
| Total/NA | Prep | 1621 Prep | | | 488555 | QLP7 | ELLE | 03/29/24 09:39 |
| Total/NA | Analysis | 1621 Plug2 | | 1 | 488604 | QLP7 | ELLE | 03/31/24 16:50 |
| Total/NA | Analysis | 1621 Sum | | 1 | 489005 | WG7O | ELLE | 04/02/24 11:37 |
| Total/NA | Analysis | 1621 | | 1 | 484302 | M98K | ELLE | 03/18/24 11:03 |

Client Sample ID: HNWWTP-EFFL-EB

Lab Sample ID: 410-163791-3

Date Collected: 09/18/23 07:10

Matrix: Water

Date Received: 03/13/24 09:40

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|----------------|-----|-----------------|--------------|---------|------|----------------------|
| Total/NA | Analysis | EPA 300.0 R2.1 | | 1 | 484414 | W7FX | ELLE | 03/18/24 14:47 |
| Total/NA | Prep | 1621 Prep | | | 487635 | QLP7 | ELLE | 03/27/24 09:59 |
| Total/NA | Analysis | 1621 Plug 1 | | 1 | 488604 | QLP7 | ELLE | 03/28/24 20:50 |
| Total/NA | Prep | 1621 Prep | | | 487635 | QLP7 | ELLE | 03/27/24 09:59 |
| Total/NA | Analysis | 1621 Plug2 | | 1 | 488604 | QLP7 | ELLE | 03/28/24 21:21 |
| Total/NA | Analysis | 1621 Sum | | 1 | 489005 | WG7O | ELLE | 04/01/24 07:34 |
| Total/NA | Analysis | 1621 | | 1 | 484302 | M98K | ELLE | 03/18/24 11:03 |

Client Sample ID: HNWWTP-INFL-EB

Lab Sample ID: 410-163791-4

Date Collected: 09/18/23 07:13

Matrix: Water

Date Received: 03/13/24 09:40

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|----------------|-----|-----------------|--------------|---------|------|----------------------|
| Total/NA | Analysis | EPA 300.0 R2.1 | | 1 | 484414 | W7FX | ELLE | 03/18/24 16:11 |
| Total/NA | Prep | 1621 Prep | | | 487635 | QLP7 | ELLE | 03/27/24 09:59 |
| Total/NA | Analysis | 1621 Plug 1 | | 1 | 488604 | QLP7 | ELLE | 03/28/24 21:52 |
| Total/NA | Prep | 1621 Prep | | | 487635 | QLP7 | ELLE | 03/27/24 09:59 |
| Total/NA | Analysis | 1621 Plug2 | | 1 | 488604 | QLP7 | ELLE | 03/28/24 22:23 |

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Client Sample ID: HNWWTP-INFL-EB
Date Collected: 09/18/23 07:13
Date Received: 03/13/24 09:40

Lab Sample ID: 410-163791-4
Matrix: Water

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------|------|----------------------|
| Total/NA | Analysis | 1621 Sum | | 1 | 489005 | WG7O | ELLE | 04/01/24 07:34 |
| Total/NA | Analysis | 1621 | | 1 | 484302 | M98K | ELLE | 03/18/24 11:03 |

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|-------------|-----------------------|-----------------------------------|
| Hawaii | State | N/A | 01-31-25 |
| The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification. | | | |
| Analysis Method | Prep Method | Matrix | Analyte |
| 1621 | | Water | Total Suspended Solids |
| 1621 Plug 1 | 1621 Prep | Water | Adsorbable Organic Fluorine (AOF) |
| 1621 Plug2 | 1621 Prep | Water | Adsorbable Organic Fluorine (AOF) |
| 1621 Sum | | Water | Adsorbable Organic Fluorine (AOF) |
| EPA 300.0 R2.1 | | Water | Fluoride ion |

Method Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

| Method | Method Description | Protocol | Laboratory |
|----------------|---|----------|------------|
| EPA 300.0 R2.1 | Anions, Ion Chromatography | EPA | ELLE |
| 1621 Plug 1 | Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography | EPA | ELLE |
| 1621 Plug2 | Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography | EPA | ELLE |
| 1621 Sum | Adsorbable Organic Fluorine (AOF) by Combustion Ion Chromatography | EPA | ELLE |
| 1621 | Percent Suspend Solids for Analysis AOF in Aqueous Samples by LC/MS | EPA | ELLE |
| 1621 Prep | Preparation, Fluorine | EPA | ELLE |

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: HONO'ULI'ULI WWTP

Job ID: 410-163791-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 410-163791-1 | HNWWTP-EFFL | Water | 09/19/23 07:54 | 03/13/24 09:40 |
| 410-163791-2 | HNWWTP-INFL | Water | 09/19/23 07:37 | 03/13/24 09:40 |
| 410-163791-3 | HNWWTP-EFFL-EB | Water | 09/18/23 07:10 | 03/13/24 09:40 |
| 410-163791-4 | HNWWTP-INFL-EB | Water | 09/18/23 07:13 | 03/13/24 09:40 |

- 1
- 2
- 3
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- 6
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- 12
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- 14



CHAIN OF CUSTODY

2045 Mills Road West TEL: (250) 655-5800 TOLL FREE 1-888-373-0881
 Sidney, British Columbia, Canada V8L 5X2 FAX: (250) 655-5811

SGS AXYS CLIENT #: 4066

| REPORT TO: Company <u>Hawaii DOH-HEER OFFICE</u> Address <u>2385 Waimanalo Home Rd #100</u> <u>Pearl City, HI 96782</u> Contact <u>Roger Brewer</u> Phone <u>808-586-4249</u> FAX E-mail <u>roger.brewer@doh.hawaii.gov</u> | | | INVOICE TO: Company <u>TetraTech</u> Address <u>737 Bishop St Ste 2340</u> <u>Honolulu, HI 96813</u> Contact <u>Eric Jensen</u> Phone <u>808-225-7084</u> FAX E-mail <u>eric.jensen@tetratech.com</u> | | | ANALYSIS REQUESTED <div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">MLA-100</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">MLA-111</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">MLA-119</div> </div> | | | | |
|---|------------------|---------------------|---|---|---------------------------------------|--|---|-------------|--|--|
| Project Name/Number: | | | Sampler's Name: | | | | | | | |
| Signature: | | | | | | | | | | |
| Client Sample Identification | Matrix | Sampling Date | Sampling Time | Container Type/No. | SGS AXYS Lab Sample ID (Lab use only) | | | | | |
| HIVWWTP-EFFL | H ₂ O | 9/19/23 | 7:54am | 3 50ml | L 40347-6 | X | X | X | | |
| HIVWWTP-INFL | " | 9/19/23 | 7:37am | 2 60ml | -12 | X | X | X | | |
| HIVWWTP-EFFL-EB | " | 9/18/23 | 7:10am | " | -3 | X | X | X | | |
| HIVWWTP-INFL-EB | " | 9/18/23 | 7:30am | " | -9 | X | X | X | | |
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| | | | | | | | | | | |
| Relinquished by (Signature) <u>Proge B</u> | | Date <u>10/3/23</u> | Time <u>9:00am</u> | Received by (Signature) <u>ASS</u> | | Courier | | Waybill No. | | |
| Relinquished by (Signature) _____ | | Date _____ | Time _____ | Date <u>10-3-2023</u> Time <u>09:20</u> | | | | | | |
| Received by (Signature) <u>[Signature]</u> | | Date <u>3/13/24</u> | Time <u>09:40</u> | | | Sample Receipt | | | | |
| Remarks <u>* Filter water samples prior to analysis (0.45um)</u> | | | | | | Cooler | | | | |
| | | | | | | Temp °C <u>12.3.9</u> <u>6.3.8</u> | | | | |
| | | | | | | Custody Seal # _____ | | | | |
| | | | | | | Seal Intact Y / N _____ | | | | |
| | | | | | | Sample Tags Y / N _____ | | | | |

my

MR

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 410-163791-1

Login Number: 163791

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Santiago, Nathaniel

| Question | Answer | Comment |
|---|--------|-------------------------------------|
| The cooler's custody seal is intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen). | True | |
| Cooler Temperature is recorded. | True | |
| WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen). | N/A | |
| WV: Container Temperature is recorded. | N/A | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | False | Refer to Job Narrative for details. |
| There are no discrepancies between the containers received and the COC. | False | Refer to Job Narrative for details. |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| There is sufficient vol. for all requested analyses. | True | |
| Is the Field Sampler's name present on COC? | False | Refer to Job Narrative for details. |
| Sample custody seals are intact. | N/A | |
| VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)? | N/A | |