

# ANALYTICAL REPORT

## PREPARED FOR

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City & County of Honolulu  
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Honolulu, Hawaii 96843

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## JOB DESCRIPTION

RED-HILL  
Weekly

## JOB NUMBER

380-122186-1

# Eurofins Eaton Analytical Pomona

## Job Notes

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The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

## Compliance Statement

1. Laboratory is accredited in accordance with TNI 2016 Standards and ISO/IEC 17025:2017.
2. Laboratory certifies that the test results meet all TNI 2016 and ISO/IEC 17025:2017 requirements unless noted under the individual analysis
3. Test results relate only to the sample(s) tested.
4. This report shall not be reproduced except in full, without the written approval of the laboratory.
5. Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below. (DW, Water matrices)

## Authorization



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# Definitions/Glossary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description  |
|-----------|--|
| ^3+       | Reporting Limit Check Standard is outside acceptance limits, high biased                                       |
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA TICs

| Qualifier | Qualifier Description   |
|-----------|---|
| J         | Indicates an Estimated Value for TICs                                     |
| N         | Presumptive evidence of material.   |
| T         | Result is a tentatively identified compound (TIC) and an estimated value. |

### GC Semi VOA

| Qualifier | Qualifier Description  |
|-----------|--|
| ^3+       | Reporting Limit Check Standard is outside acceptance limits, high biased |

## Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|---|
| ☼              | 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: City & County of Honolulu  
Project: RED-HILL

Job ID: 380-122186-1

**Job ID: 380-122186-1**

**Eurofins Eaton Analytical Pomona**

## **Job Narrative 380-122186-1**

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 11/14/2024 10:12 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.9°C and 2.7°C.

### **GC/MS Semi VOA**

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

### **Gasoline Range Organics**

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

### **Diesel Range Organics**

Method 8015B\_DRO\_LL\_CS: The method reporting limit check (MRL) for preparation batch 570-504083 and analytical batch 570-508306 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

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

# Detection Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

No Detections.

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-2**

No Detections.

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

| Analyte  | Result | Qualifier | RL     | Unit | Dil Fac | D | Method | Prep Type |
|----------|--------|-----------|--------|------|---------|---|--------|-----------|
| Dieldrin | 0.010  |           | 0.0097 | ug/L | 1       |   | 525.2  | Total/NA  |

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-4**

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona



# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS)**

| Analyte                          | Result  | Qualifier | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|---------|-----------|--------|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene              | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2,4'-DDD                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2,4'-DDE                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2,4'-DDT                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2,4-Dinitrotoluene               | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2,6-Dinitrotoluene               | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 2-Methylnaphthalene              | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 4,4'-DDD                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 4,4'-DDE                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| 4,4'-DDT                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Acenaphthene                     | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Acenaphthylene                   | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Acetochlor                       | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Alachlor                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| alpha-BHC                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| alpha-Chlordane                  | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Anthracene                       | <0.019  |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Atrazine                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Benz(a)anthracene                | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Benzo[a]pyrene                   | <0.019  |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Benzo[b]fluoranthene             | <0.019  |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Benzo[g,h,i]perylene             | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Benzo[k]fluoranthene             | <0.019  |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| beta-BHC                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Bis(2-ethylhexyl) phthalate      | <0.58   |           | 0.58   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Bromacil                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Butachlor                        | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Butylbenzylphthalate             | <0.48   |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Chlorobenzilate                  | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Chloroneb                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Chlorothalonil (Draconil, Bravo) | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Chlorpyrifos                     | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Chrysene                         | <0.019  |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| delta-BHC                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Di(2-ethylhexyl)adipate          | <0.58   |           | 0.58   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Dibenz(a,h)anthracene            | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Diclorvos (DDVP)                 | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Dieldrin                         | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Diethylphthalate                 | <0.48   |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Dimethylphthalate                | <0.48   |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Di-n-butyl phthalate             | <0.97   |           | 0.97   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Di-n-octyl phthalate             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Endosulfan I (Alpha)             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Endosulfan II (Beta)             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Endosulfan sulfate               | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Endrin                           | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Endrin aldehyde                  | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| EPTC                             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Fluoranthene                     | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |

# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)**

| Analyte                          | Result  | Qualifier | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|---------|-----------|--------|------|---|----------------|----------------|---------|
| Fluorene                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| gamma-Chlordane                  | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Heptachlor                       | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Heptachlor epoxide (isomer B)    | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Hexachlorobenzene                | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Hexachlorocyclopentadiene        | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Indeno[1,2,3-cd]pyrene           | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Isophorone                       | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Lindane                          | <0.0097 | ^3+       | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Malathion                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Methoxychlor                     | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Metolachlor                      | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Molinate                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Naphthalene                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Parathion                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Pendimethalin (Penoxaline)       | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Phenanthrene                     | <0.039  |           | 0.039  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Propachlor                       | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Pyrene                           | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Simazine                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Terbacil                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Terbutylazine                    | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Thiobencarb                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Total Permethrin (mixed isomers) | <0.19   |           | 0.19   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| trans-Nonachlor                  | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Trifluralin                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:01 | 1       |

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|----|---------|----------------|----------------|---------|
| Tentatively Identified Compound | None        |           | ug/L |   |    | N/A     | 11/20/24 08:01 | 11/21/24 16:01 | 1       |

| Surrogate          | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Nitro-m-xylene   | 95        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Perylene-d12       | 94        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:01 | 1       |
| Triphenylphosphate | 104       |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:01 | 1       |

**Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)**

| Analyte               | Result | Qualifier | RL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------|--------|-----------|------|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene   | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| 2-Methylnaphthalene   | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Acenaphthene          | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Acenaphthylene        | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Anthracene            | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Benzo[a]anthracene    | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Benzo[a]pyrene        | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Benzo[b]fluoranthene  | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Benzo[g,h,i]perylene  | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Benzo[k]fluoranthene  | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Chrysene              | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Dibenz(a,h)anthracene | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Fluoranthene          | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |

Eurofins Eaton Analytical Pomona



# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)**

| Analyte                | Result | Qualifier | RL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|------|---|----------------|----------------|---------|
| Fluorene               | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Naphthalene            | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Phenanthrene           | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Pyrene                 | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:20 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 87        |           | 28 - 127 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| 2-Fluorobiphenyl (Surr)     | 64        |           | 31 - 120 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| 2-Fluorophenol (Surr)       | 63        |           | 17 - 120 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Nitrobenzene-d5 (Surr)      | 73        |           | 27 - 120 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| Phenol-d6 (Surr)            | 29        |           | 10 - 120 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |
| p-Terphenyl-d14 (Surr)      | 73        |           | 45 - 120 | 11/18/24 09:17 | 11/22/24 21:20 | 1       |

**Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT   | CAS No.  | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|------|----------|----------------|----------------|---------|
| Heptane                         | 75          | T J N     | ug/L |   | 2.25 | 142-82-5 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 92        |           | 33 - 139 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |
| 2-Fluorobiphenyl (Surr)     | 76        |           | 33 - 126 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |
| 2-Fluorophenol (Surr)       | 48        |           | 12 - 120 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |
| Nitrobenzene-d5 (Surr)      | 87        |           | 36 - 120 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |
| Phenol-d6 (Surr)            | 28        |           | 10 - 120 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |
| p-Terphenyl-d14 (Surr)      | 92        |           | 47 - 131 | 11/18/24 09:17 | 12/04/24 18:27 | 1       |

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)**

| Analyte      | Result | Qualifier | RL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|----|------|---|----------|----------------|---------|
| GRO (C6-C10) | <10    |           | 10 | ug/L |   |          | 11/25/24 15:08 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 87        |           | 38 - 134 |          | 11/25/24 15:08 | 1       |

**Method: SW846 8015B - Diesel Range Organics (DRO) (GC) Low Level**

| Analyte                            | Result | Qualifier | RL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------|--------|-----------|----|------|---|----------------|----------------|---------|
| Diesel Range Organics (C10-C24)    | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 17:49 | 1       |
| Motor Oil Range Organics [C24-C36] | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 17:49 | 1       |
| C8-C18                             | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 17:49 | 1       |

| Surrogate           | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane (Surr) | 118       |           | 60 - 130 | 11/16/24 11:42 | 11/27/24 17:49 | 1       |

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-2**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)**

| Analyte      | Result | Qualifier | RL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|----|------|---|----------|----------------|---------|
| GRO (C6-C10) | <10    |           | 10 | ug/L |   |          | 11/25/24 17:18 | 1       |

# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-2**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 80        |           | 38 - 134 |          | 11/25/24 17:18 | 1       |

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS)**

| Analyte                          | Result       | Qualifier | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|--------------|-----------|--------|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene              | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2,4'-DDD                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2,4'-DDE                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2,4'-DDT                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2,4-Dinitrotoluene               | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2,6-Dinitrotoluene               | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 2-Methylnaphthalene              | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 4,4'-DDD                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 4,4'-DDE                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| 4,4'-DDT                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Acenaphthene                     | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Acenaphthylene                   | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Acetochlor                       | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Alachlor                         | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| alpha-BHC                        | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| alpha-Chlordane                  | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Anthracene                       | <0.019       |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Atrazine                         | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Benz(a)anthracene                | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Benzo[a]pyrene                   | <0.019       |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Benzo[b]fluoranthene             | <0.019       |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Benzo[g,h,i]perylene             | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Benzo[k]fluoranthene             | <0.019       |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| beta-BHC                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Bis(2-ethylhexyl) phthalate      | <0.58        |           | 0.58   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Bromacil                         | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Butachlor                        | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Butylbenzylphthalate             | <0.48        |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Chlorobenzilate                  | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Chloroneb                        | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Chlorothalonil (Draconil, Bravo) | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Chlorpyrifos                     | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Chrysene                         | <0.019       |           | 0.019  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| delta-BHC                        | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Di(2-ethylhexyl)adipate          | <0.58        |           | 0.58   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Dibenz(a,h)anthracene            | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Diclorvos (DDVP)                 | <0.048       |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| <b>Dieldrin</b>                  | <b>0.010</b> |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Diethylphthalate                 | <0.48        |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Dimethylphthalate                | <0.48        |           | 0.48   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Di-n-butyl phthalate             | <0.97        |           | 0.97   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Di-n-octyl phthalate             | <0.097       |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |

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# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)**

| Analyte                          | Result  | Qualifier | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|---------|-----------|--------|------|---|----------------|----------------|---------|
| Endosulfan I (Alpha)             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Endosulfan II (Beta)             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Endosulfan sulfate               | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Endrin                           | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Endrin aldehyde                  | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| EPTC                             | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Fluoranthene                     | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Fluorene                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| gamma-Chlordane                  | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Heptachlor                       | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Heptachlor epoxide (isomer B)    | <0.0097 |           | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Hexachlorobenzene                | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Hexachlorocyclopentadiene        | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Indeno[1,2,3-cd]pyrene           | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Isophorone                       | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Lindane                          | <0.0097 | ^3+       | 0.0097 | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Malathion                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Methoxychlor                     | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Metolachlor                      | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Molinate                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Naphthalene                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Parathion                        | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Pendimethalin (Penoxaline)       | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Phenanthrene                     | <0.039  |           | 0.039  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Propachlor                       | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Pyrene                           | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Simazine                         | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Terbacil                         | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Terbutylazine                    | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Thiobencarb                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Total Permethrin (mixed isomers) | <0.19   |           | 0.19   | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| trans-Nonachlor                  | <0.048  |           | 0.048  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Trifluralin                      | <0.097  |           | 0.097  | ug/L |   | 11/20/24 08:01 | 11/21/24 16:21 | 1       |

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|----|---------|----------------|----------------|---------|
| Tentatively Identified Compound | None        |           | ug/L |   |    | N/A     | 11/20/24 08:01 | 11/21/24 16:21 | 1       |

| Surrogate          | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Nitro-m-xylene   | 96        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Perylene-d12       | 96        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:21 | 1       |
| Triphenylphosphate | 101       |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 16:21 | 1       |

**Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)**

| Analyte             | Result | Qualifier | RL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|---------------------|--------|-----------|------|------|---|----------------|----------------|---------|
| 1-Methylnaphthalene | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| 2-Methylnaphthalene | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Acenaphthene        | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Acenaphthylene      | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Anthracene          | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Benzo[a]anthracene  | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |

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# Client Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

**Method: EPA 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)**

| Analyte                | Result | Qualifier | RL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|------|---|----------------|----------------|---------|
| Benzo[a]pyrene         | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Benzo[b]fluoranthene   | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Benzo[g,h,i]perylene   | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Benzo[k]fluoranthene   | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Chrysene               | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Dibenz[a,h]anthracene  | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Fluoranthene           | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Fluorene               | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Naphthalene            | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Phenanthrene           | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Pyrene                 | <0.19  |           | 0.19 | ug/L |   | 11/18/24 09:17 | 11/22/24 21:42 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 96        |           | 28 - 127 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| 2-Fluorobiphenyl (Surr)     | 75        |           | 31 - 120 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| 2-Fluorophenol (Surr)       | 79        |           | 17 - 120 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Nitrobenzene-d5 (Surr)      | 83        |           | 27 - 120 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| Phenol-d6 (Surr)            | 37        |           | 10 - 120 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |
| p-Terphenyl-d14 (Surr)      | 73        |           | 45 - 120 | 11/18/24 09:17 | 11/22/24 21:42 | 1       |

**Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT   | CAS No.  | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|------|----------|----------------|----------------|---------|
| Heptane                         | 110         | T J N     | ug/L |   | 2.25 | 142-82-5 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2,4,6-Tribromophenol (Surr) | 111       |           | 33 - 139 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |
| 2-Fluorobiphenyl (Surr)     | 90        |           | 33 - 126 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |
| 2-Fluorophenol (Surr)       | 56        |           | 12 - 120 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |
| Nitrobenzene-d5 (Surr)      | 97        |           | 36 - 120 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |
| Phenol-d6 (Surr)            | 32        |           | 10 - 120 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |
| p-Terphenyl-d14 (Surr)      | 91        |           | 47 - 131 | 11/18/24 09:17 | 12/04/24 18:51 | 1       |

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)**

| Analyte      | Result | Qualifier | RL | Unit | D | Prepared | Analyzed       | Dil Fac |
|--------------|--------|-----------|----|------|---|----------|----------------|---------|
| GRO (C6-C10) | <10    |           | 10 | ug/L |   |          | 11/25/24 15:34 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------|----------------|---------|
| 4-Bromofluorobenzene (Surr) | 90        |           | 38 - 134 |          | 11/25/24 15:34 | 1       |

**Method: SW846 8015B - Diesel Range Organics (DRO) (GC) Low Level**

| Analyte                            | Result | Qualifier | RL | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------------------|--------|-----------|----|------|---|----------------|----------------|---------|
| Diesel Range Organics (C10-C24)    | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 18:11 | 1       |
| Motor Oil Range Organics [C24-C36] | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 18:11 | 1       |
| C8-C18                             | <26    |           | 26 | ug/L |   | 11/16/24 11:42 | 11/27/24 18:11 | 1       |

| Surrogate           | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|---------------------|-----------|-----------|----------|----------------|----------------|---------|
| n-Octacosane (Surr) | 109       |           | 60 - 130 | 11/16/24 11:42 | 11/27/24 18:11 | 1       |

# Client Sample Results

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-4**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)**

| Analyte                     | Result    | Qualifier | RL       | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|------|---|----------|----------------|---------|
| GRO (C6-C10)                | <10       |           | 10       | ug/L |   |          | 11/25/24 17:44 | 1       |
| Surrogate                   | %Recovery | Qualifier | Limits   |      |   | Prepared | Analyzed       | Dil Fac |
| 4-Bromofluorobenzene (Surr) | 80        |           | 38 - 134 |      |   |          | 11/25/24 17:44 | 1       |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

# Action Limit Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

## Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits have been highlighted for your convenience.

| Analyte                       | Result  | Qualifier | Unit | EPAMCL |  | RL     | Method    | Prep Type |
|-------------------------------|---------|-----------|------|--------|--|--------|-----------|-----------|
|                               |         |           |      | Limit  |  |        |           |           |
| Alachlor                      | <0.048  |           | ug/L | 2      |  | 0.048  | 525.2     | Total/NA  |
| Atrazine                      | <0.048  |           | ug/L | 3      |  | 0.048  | 525.2     | Total/NA  |
| Benzo[a]pyrene                | <0.019  |           | ug/L | 0.2    |  | 0.019  | 525.2     | Total/NA  |
| Bis(2-ethylhexyl) phthalate   | <0.58   |           | ug/L | 6      |  | 0.58   | 525.2     | Total/NA  |
| Di(2-ethylhexyl)adipate       | <0.58   |           | ug/L | 400    |  | 0.58   | 525.2     | Total/NA  |
| Endrin                        | <0.0097 |           | ug/L | 2      |  | 0.0097 | 525.2     | Total/NA  |
| Heptachlor                    | <0.0097 |           | ug/L | 0.4    |  | 0.0097 | 525.2     | Total/NA  |
| Heptachlor epoxide (isomer B) | <0.0097 |           | ug/L | 0.2    |  | 0.0097 | 525.2     | Total/NA  |
| Hexachlorobenzene             | <0.048  |           | ug/L | 1      |  | 0.048  | 525.2     | Total/NA  |
| Hexachlorocyclopentadiene     | <0.048  |           | ug/L | 50     |  | 0.048  | 525.2     | Total/NA  |
| Lindane                       | <0.0097 | ^3+       | ug/L | 0.2    |  | 0.0097 | 525.2     | Total/NA  |
| Methoxychlor                  | <0.048  |           | ug/L | 40     |  | 0.048  | 525.2     | Total/NA  |
| Simazine                      | <0.048  |           | ug/L | 4      |  | 0.048  | 525.2     | Total/NA  |
| Benzo[a]pyrene                | <0.19   |           | ug/L | 0.2    |  | 0.19   | 625.1 SIM | Total/NA  |

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

## Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits have been highlighted for your convenience.

| Analyte                       | Result  | Qualifier | Unit | EPAMCL |  | RL     | Method    | Prep Type |
|-------------------------------|---------|-----------|------|--------|--|--------|-----------|-----------|
|                               |         |           |      | Limit  |  |        |           |           |
| Alachlor                      | <0.048  |           | ug/L | 2      |  | 0.048  | 525.2     | Total/NA  |
| Atrazine                      | <0.048  |           | ug/L | 3      |  | 0.048  | 525.2     | Total/NA  |
| Benzo[a]pyrene                | <0.019  |           | ug/L | 0.2    |  | 0.019  | 525.2     | Total/NA  |
| Bis(2-ethylhexyl) phthalate   | <0.58   |           | ug/L | 6      |  | 0.58   | 525.2     | Total/NA  |
| Di(2-ethylhexyl)adipate       | <0.58   |           | ug/L | 400    |  | 0.58   | 525.2     | Total/NA  |
| Endrin                        | <0.0097 |           | ug/L | 2      |  | 0.0097 | 525.2     | Total/NA  |
| Heptachlor                    | <0.0097 |           | ug/L | 0.4    |  | 0.0097 | 525.2     | Total/NA  |
| Heptachlor epoxide (isomer B) | <0.0097 |           | ug/L | 0.2    |  | 0.0097 | 525.2     | Total/NA  |
| Hexachlorobenzene             | <0.048  |           | ug/L | 1      |  | 0.048  | 525.2     | Total/NA  |
| Hexachlorocyclopentadiene     | <0.048  |           | ug/L | 50     |  | 0.048  | 525.2     | Total/NA  |
| Lindane                       | <0.0097 | ^3+       | ug/L | 0.2    |  | 0.0097 | 525.2     | Total/NA  |
| Methoxychlor                  | <0.048  |           | ug/L | 40     |  | 0.048  | 525.2     | Total/NA  |
| Simazine                      | <0.048  |           | ug/L | 4      |  | 0.048  | 525.2     | Total/NA  |
| Benzo[a]pyrene                | <0.19   |           | ug/L | 0.2    |  | 0.19   | 625.1 SIM | Total/NA  |

# Surrogate Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID        | Client Sample ID                 | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |
|----------------------|----------------------------------|--|-----------------|-----------------|
|                      |                                  | 2NMX<br>(70-130)                               | PRY<br>(70-130) | TPP<br>(70-130) |
| 380-121839-R-1-A DU  | Duplicate                        | 97   | 99              | 103             |
| 380-122132-AD-1-A MS | Matrix Spike                     | 96   | 96              | 104             |
| 380-122186-1         | AIEA GULCH WELLS PUMP 2          | 95   | 94              | 104             |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260)<br>P2 | 96   | 96              | 101             |
| LCS 380-119846/23-A  | Lab Control Sample               | 94   | 95              | 100             |
| LCSD 380-119846/24-A | Lab Control Sample Dup           | 97   | 94              | 100             |
| MB 380-119846/21-A   | Method Blank                     | 96   | 93              | 106             |
| MRL 380-119846/22-A  | Lab Control Sample               | 97   | 90              | 99              |

**Surrogate Legend**  
 2NMX = 2-Nitro-m-xylene  
 PRY = Perylene-d12  
 TPP = Triphenylphosphate

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID     | Client Sample ID                 | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                  |                    |
|-------------------|----------------------------------|--|-----------------|-----------------|-----------------|------------------|--------------------|
|                   |                                  | TBP<br>(33-139)                                | FBP<br>(33-126) | 2FP<br>(12-120) | NBZ<br>(36-120) | PHL6<br>(10-120) | TPHd14<br>(47-131) |
| 380-122186-1      | AIEA GULCH WELLS PUMP 2          | 92   | 76              | 48              | 87              | 28               | 92                 |
| 380-122186-3      | AIEA WELLS PUMPS 1&2 (260)<br>P2 | 111  | 90              | 56              | 97              | 32               | 91                 |
| MB 570-504385/1-A | Method Blank                     | 89   | 72              | 50              | 76              | 33               | 86                 |

**Surrogate Legend**  
 TBP = 2,4,6-Tribromophenol (Surr)  
 FBP = 2-Fluorobiphenyl (Surr)  
 2FP = 2-Fluorophenol (Surr)  
 NBZ = Nitrobenzene-d5 (Surr)  
 PHL6 = Phenol-d6 (Surr)  
 TPHd14 = p-Terphenyl-d14 (Surr)

## Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID        | Client Sample ID                 | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                  |                    |
|----------------------|----------------------------------|--|-----------------|-----------------|-----------------|------------------|--------------------|
|                      |                                  | TBP<br>(28-127)                                | FBP<br>(31-120) | 2FP<br>(17-120) | NBZ<br>(27-120) | PHL6<br>(10-120) | TPHd14<br>(45-120) |
| 380-122186-1         | AIEA GULCH WELLS PUMP 2          | 87   | 64              | 63              | 73              | 29               | 73                 |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260)<br>P2 | 96   | 75              | 79              | 83              | 37               | 73                 |
| 380-122227-A-3-A MS  | Matrix Spike                     | 96   | 74              | 67              | 69              | 34               | 79                 |
| 380-122227-A-3-B MSD | Matrix Spike Duplicate           | 91   | 77              | 59              | 73              | 32               | 83                 |
| LCS 570-504385/2-A   | Lab Control Sample               | 87   | 72              | 58              | 65              | 34               | 77                 |
| LCSD 570-504385/3-A  | Lab Control Sample Dup           | 92   | 68              | 64              | 64              | 36               | 84                 |
| MB 570-504385/1-A    | Method Blank                     | 80   | 58              | 48              | 64              | 28               | 66                 |

**Surrogate Legend**  
 TBP = 2,4,6-Tribromophenol (Surr)  
 FBP = 2-Fluorobiphenyl (Surr)  
 2FP = 2-Fluorophenol (Surr)

# Surrogate Summary

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

NBZ = Nitrobenzene-d5 (Surr)  
 PHL6 = Phenol-d6 (Surr)  
 TPHd14 = p-Terphenyl-d14 (Surr)

## Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID      | Client Sample ID                     | BFB1<br>(38-134) |
|--------------------|--------------------------------------|------------------|
| 380-122186-1       | AIEA GULCH WELLS PUMP 2              | 87               |
| 380-122186-2       | TB: AIEA GULCH WELLS PUMP<br>2       | 80               |
| 380-122186-3       | AIEA WELLS PUMPS 1&2 (260)<br>P2     | 90               |
| 380-122186-4       | TB: AIEA WELLS PUMPS 1&2<br>(260) P2 | 80               |
| 380-122227-C-3 MS  | Matrix Spike                         | 97               |
| 380-122227-C-3 MSD | Matrix Spike Duplicate               | 98               |
| LCS 570-507194/4   | Lab Control Sample                   | 96               |
| LCS 570-507194/5   | Lab Control Sample Dup               | 96               |
| MB 570-507194/6    | Method Blank                         | 94               |
| MRL 570-507194/3   | Lab Control Sample                   | 91               |

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

## Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

| Lab Sample ID        | Client Sample ID                 | OTCSN1<br>(60-130) |
|----------------------|----------------------------------|--------------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2          | 118                |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260)<br>P2 | 109                |
| 380-122227-B-3-A MS  | Matrix Spike                     | 112                |
| 380-122227-B-3-B MSD | Matrix Spike Duplicate           | 116                |
| LCS 570-504083/2-A   | Lab Control Sample               | 112                |
| LCS 570-504083/3-A   | Lab Control Sample Dup           | 113                |
| MB 570-504083/1-A    | Method Blank                     | 112                |
| MRL 570-504083/4-A   | Lab Control Sample               | 119                |

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)



# QC Sample Results

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 380-119846/21-A**  
**Matrix: Water**  
**Analysis Batch: 120072**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 119846**

| Analyte                          | MB      | MB        | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|---------|-----------|--------|------|---|----------------|----------------|---------|
|                                  | Result  | Qualifier |        |      |   |                |                |         |
| 1-Methylnaphthalene              | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2,4'-DDD                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2,4'-DDE                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2,4'-DDT                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2,4-Dinitrotoluene               | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2,6-Dinitrotoluene               | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 2-Methylnaphthalene              | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 4,4'-DDD                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 4,4'-DDE                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| 4,4'-DDT                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Acenaphthene                     | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Acenaphthylene                   | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Acetochlor                       | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Alachlor                         | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| alpha-BHC                        | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| alpha-Chlordane                  | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Anthracene                       | <0.020  |           | 0.020  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Atrazine                         | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Benz(a)anthracene                | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Benzo[a]pyrene                   | <0.020  |           | 0.020  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Benzo[b]fluoranthene             | <0.020  |           | 0.020  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Benzo[g,h,i]perylene             | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Benzo[k]fluoranthene             | <0.020  |           | 0.020  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| beta-BHC                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Bis(2-ethylhexyl) phthalate      | <0.60   |           | 0.60   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Bromacil                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Butachlor                        | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Butylbenzylphthalate             | <0.50   |           | 0.50   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Chlorobenzilate                  | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Chloroneb                        | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Chlorothalonil (Draconil, Bravo) | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Chlorpyrifos                     | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Chrysene                         | <0.020  |           | 0.020  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| delta-BHC                        | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Di(2-ethylhexyl)adipate          | <0.60   |           | 0.60   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Dibenz(a,h)anthracene            | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Diclorvos (DDVP)                 | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Dieldrin                         | <0.0099 |           | 0.0099 | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Diethylphthalate                 | <0.50   |           | 0.50   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Dimethylphthalate                | <0.50   |           | 0.50   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Di-n-butyl phthalate             | <0.99   |           | 0.99   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Di-n-octyl phthalate             | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Endosulfan I (Alpha)             | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Endosulfan II (Beta)             | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Endosulfan sulfate               | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Endrin                           | <0.0099 |           | 0.0099 | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Endrin aldehyde                  | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| EPTC                             | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |

Eurofins Eaton Analytical Pomona

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 380-119846/21-A**  
**Matrix: Water**  
**Analysis Batch: 120072**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 119846**

| Analyte                          | MB      | MB        | RL     | Unit | D | Prepared       | Analyzed       | Dil Fac |
|----------------------------------|---------|-----------|--------|------|---|----------------|----------------|---------|
|                                  | Result  | Qualifier |        |      |   |                |                |         |
| Fluoranthene                     | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Fluorene                         | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| gamma-Chlordane                  | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Heptachlor                       | <0.0099 |           | 0.0099 | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Heptachlor epoxide (isomer B)    | <0.0099 |           | 0.0099 | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Hexachlorobenzene                | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Hexachlorocyclopentadiene        | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Indeno[1,2,3-cd]pyrene           | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Isophorone                       | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Lindane                          | <0.0099 | ^3+       | 0.0099 | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Malathion                        | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Methoxychlor                     | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Metolachlor                      | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Molinate                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Naphthalene                      | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Parathion                        | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Pendimethalin (Penoxaline)       | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Phenanthrene                     | <0.040  |           | 0.040  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Propachlor                       | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Pyrene                           | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Simazine                         | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Terbacil                         | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Terbutylazine                    | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Thiobencarb                      | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Total Permethrin (mixed isomers) | <0.20   |           | 0.20   | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| trans-Nonachlor                  | <0.050  |           | 0.050  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Trifluralin                      | <0.099  |           | 0.099  | ug/L |   | 11/20/24 08:01 | 11/21/24 13:40 | 1       |

| Tentatively Identified Compound | MB          | MB        | Unit | D | RT    | CAS No.  | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|-------|----------|----------------|----------------|---------|
|                                 | Est. Result | Qualifier |      |   |       |          |                |                |         |
| 9-Octadecenamamide, (Z)-        | 1.12        | T J N     | ug/L |   | 7.98  | 301-02-0 | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Unknown                         | 0.813       | T J       | ug/L |   | 11.24 | N/A      | 11/20/24 08:01 | 11/21/24 13:40 | 1       |

| Surrogate          | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|--------------------|-----------|-----------|----------|----------------|----------------|---------|
|                    | %Recovery | Qualifier |          |                |                |         |
| 2-Nitro-m-xylene   | 96        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Perylene-d12       | 93        |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 13:40 | 1       |
| Triphenylphosphate | 106       |           | 70 - 130 | 11/20/24 08:01 | 11/21/24 13:40 | 1       |

**Lab Sample ID: LCS 380-119846/23-A**  
**Matrix: Water**  
**Analysis Batch: 120072**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 119846**

| Analyte             | Spike Added | LCS    | LCS       | Unit | D | %Rec | %Rec Limits |
|---------------------|-------------|--------|-----------|------|---|------|-------------|
|                     |             | Result | Qualifier |      |   |      |             |
| 1-Methylnaphthalene | 1.98        | 1.93   |           | ug/L |   | 98   | 70 - 130    |
| 2,4'-DDD            | 1.98        | 2.03   |           | ug/L |   | 102  | 70 - 130    |
| 2,4'-DDE            | 1.98        | 2.06   |           | ug/L |   | 104  | 70 - 130    |
| 2,4'-DDT            | 1.98        | 2.00   |           | ug/L |   | 101  | 70 - 130    |
| 2,4-Dinitrotoluene  | 1.98        | 1.57   |           | ug/L |   | 79   | 70 - 130    |
| 2,6-Dinitrotoluene  | 1.98        | 1.66   |           | ug/L |   | 84   | 70 - 130    |

Eurofins Eaton Analytical Pomona

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-119846/23-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                          | Spike | LCS    | LCS       | Unit | D | %Rec | %Rec<br>Limits |
|----------------------------------|-------|--------|-----------|------|---|------|----------------|
|                                  | Added | Result | Qualifier |      |   |      |                |
| 2-Methylnaphthalene              | 1.98  | 1.95   |           | ug/L |   | 98   | 70 - 130       |
| 4,4'-DDD                         | 1.98  | 2.05   |           | ug/L |   | 104  | 70 - 130       |
| 4,4'-DDE                         | 1.98  | 1.98   |           | ug/L |   | 100  | 70 - 130       |
| 4,4'-DDT                         | 1.98  | 2.05   |           | ug/L |   | 104  | 70 - 130       |
| Acenaphthene                     | 1.98  | 1.94   |           | ug/L |   | 98   | 70 - 130       |
| Acenaphthylene                   | 1.98  | 1.92   |           | ug/L |   | 97   | 70 - 130       |
| Acetochlor                       | 1.98  | 2.02   |           | ug/L |   | 102  | 70 - 130       |
| Alachlor                         | 1.98  | 2.11   |           | ug/L |   | 106  | 70 - 130       |
| alpha-BHC                        | 1.98  | 1.97   |           | ug/L |   | 99   | 70 - 130       |
| alpha-Chlordane                  | 1.98  | 2.02   |           | ug/L |   | 102  | 70 - 130       |
| Anthracene                       | 1.98  | 1.83   |           | ug/L |   | 93   | 70 - 130       |
| Atrazine                         | 1.98  | 2.12   |           | ug/L |   | 107  | 70 - 130       |
| Benz(a)anthracene                | 1.98  | 1.88   |           | ug/L |   | 95   | 70 - 130       |
| Benzo[a]pyrene                   | 1.98  | 1.80   |           | ug/L |   | 91   | 70 - 130       |
| Benzo[b]fluoranthene             | 1.98  | 2.07   |           | ug/L |   | 105  | 70 - 130       |
| Benzo[g,h,i]perylene             | 1.98  | 2.04   |           | ug/L |   | 103  | 70 - 130       |
| Benzo[k]fluoranthene             | 1.98  | 2.05   |           | ug/L |   | 104  | 70 - 130       |
| beta-BHC                         | 1.98  | 2.01   |           | ug/L |   | 102  | 70 - 130       |
| Bis(2-ethylhexyl) phthalate      | 1.98  | 2.12   |           | ug/L |   | 107  | 70 - 130       |
| Bromacil                         | 1.98  | 1.90   |           | ug/L |   | 96   | 70 - 130       |
| Butachlor                        | 1.98  | 2.12   |           | ug/L |   | 107  | 70 - 130       |
| Butylbenzylphthalate             | 1.98  | 2.21   |           | ug/L |   | 111  | 70 - 130       |
| Chlorobenzilate                  | 1.98  | 1.73   |           | ug/L |   | 87   | 70 - 130       |
| Chloroneb                        | 1.98  | 2.10   |           | ug/L |   | 106  | 70 - 130       |
| Chlorothalonil (Draconil, Bravo) | 1.98  | 2.11   |           | ug/L |   | 106  | 70 - 130       |
| Chlorpyrifos                     | 1.98  | 2.08   |           | ug/L |   | 105  | 70 - 130       |
| Chrysene                         | 1.98  | 1.99   |           | ug/L |   | 100  | 70 - 130       |
| delta-BHC                        | 1.98  | 2.00   |           | ug/L |   | 101  | 70 - 130       |
| Di(2-ethylhexyl)adipate          | 1.98  | 2.03   |           | ug/L |   | 102  | 70 - 130       |
| Dibenz(a,h)anthracene            | 1.98  | 1.90   |           | ug/L |   | 96   | 70 - 130       |
| Diclorvos (DDVP)                 | 1.98  | 1.92   |           | ug/L |   | 97   | 70 - 130       |
| Dieldrin                         | 1.98  | 1.95   |           | ug/L |   | 99   | 70 - 130       |
| Diethylphthalate                 | 1.98  | 2.04   |           | ug/L |   | 103  | 70 - 130       |
| Dimethylphthalate                | 1.98  | 2.03   |           | ug/L |   | 102  | 70 - 130       |
| Di-n-butyl phthalate             | 3.96  | 4.20   |           | ug/L |   | 106  | 70 - 130       |
| Di-n-octyl phthalate             | 1.98  | 1.85   |           | ug/L |   | 93   | 70 - 130       |
| Endosulfan I (Alpha)             | 1.98  | 1.97   |           | ug/L |   | 99   | 70 - 130       |
| Endosulfan II (Beta)             | 1.98  | 1.97   |           | ug/L |   | 99   | 70 - 130       |
| Endosulfan sulfate               | 1.98  | 2.00   |           | ug/L |   | 101  | 70 - 130       |
| Endrin                           | 1.98  | 1.89   |           | ug/L |   | 96   | 70 - 130       |
| Endrin aldehyde                  | 1.98  | 1.86   |           | ug/L |   | 94   | 60 - 130       |
| EPTC                             | 1.98  | 2.02   |           | ug/L |   | 102  | 70 - 130       |
| Fluoranthene                     | 1.98  | 2.07   |           | ug/L |   | 105  | 70 - 130       |
| Fluorene                         | 1.98  | 2.03   |           | ug/L |   | 102  | 70 - 130       |
| gamma-Chlordane                  | 1.98  | 2.02   |           | ug/L |   | 102  | 70 - 130       |
| Heptachlor                       | 1.98  | 1.92   |           | ug/L |   | 97   | 70 - 130       |
| Heptachlor epoxide (isomer B)    | 1.98  | 1.95   |           | ug/L |   | 98   | 70 - 130       |
| Hexachlorobenzene                | 1.98  | 1.86   |           | ug/L |   | 94   | 70 - 130       |
| Hexachlorocyclopentadiene        | 1.98  | 1.84   |           | ug/L |   | 93   | 70 - 130       |

Eurofins Eaton Analytical Pomona

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-119846/23-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                    | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec     |  |
|----------------------------|-------------|------------|---------------|------|---|------|----------|--|
|                            |             |            |               |      |   |      | Limits   |  |
| Indeno[1,2,3-cd]pyrene     | 1.98        | 1.99       |               | ug/L |   | 100  | 70 - 130 |  |
| Isophorone                 | 1.98        | 1.93       |               | ug/L |   | 97   | 70 - 130 |  |
| Lindane                    | 1.98        | 1.85       |               | ug/L |   | 93   | 70 - 130 |  |
| Malathion                  | 1.98        | 1.97       |               | ug/L |   | 100  | 70 - 130 |  |
| Methoxychlor               | 1.98        | 1.83       |               | ug/L |   | 92   | 70 - 130 |  |
| Metolachlor                | 1.98        | 2.08       |               | ug/L |   | 105  | 70 - 130 |  |
| Molinate                   | 1.98        | 2.03       |               | ug/L |   | 102  | 70 - 130 |  |
| Naphthalene                | 1.98        | 1.95       |               | ug/L |   | 98   | 70 - 130 |  |
| Parathion                  | 1.98        | 1.90       |               | ug/L |   | 96   | 70 - 130 |  |
| Pendimethalin (Penoxaline) | 1.98        | 1.81       |               | ug/L |   | 91   | 70 - 130 |  |
| Phenanthrene               | 1.98        | 1.89       |               | ug/L |   | 96   | 70 - 130 |  |
| Propachlor                 | 1.98        | 2.02       |               | ug/L |   | 102  | 70 - 130 |  |
| Pyrene                     | 1.98        | 2.07       |               | ug/L |   | 105  | 70 - 130 |  |
| Simazine                   | 1.98        | 2.12       |               | ug/L |   | 107  | 70 - 130 |  |
| Terbacil                   | 1.98        | 1.91       |               | ug/L |   | 96   | 70 - 130 |  |
| Terbuthylazine             | 1.98        | 2.07       |               | ug/L |   | 104  | 70 - 130 |  |
| Thiobencarb                | 1.98        | 2.08       |               | ug/L |   | 105  | 70 - 130 |  |
| trans-Nonachlor            | 1.98        | 1.97       |               | ug/L |   | 100  | 70 - 130 |  |
| Trifluralin                | 1.98        | 1.72       |               | ug/L |   | 87   | 70 - 130 |  |

| Surrogate          | LCS LCS   |           | Limits   |
|--------------------|-----------|-----------|----------|
|                    | %Recovery | Qualifier |          |
| 2-Nitro-m-xylene   | 94        |           | 70 - 130 |
| Perylene-d12       | 95        |           | 70 - 130 |
| Triphenylphosphate | 100       |           | 70 - 130 |

Lab Sample ID: LCSD 380-119846/24-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119846

| Analyte             | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec     |   | RPD | Limit |
|---------------------|-------------|-------------|----------------|------|---|------|----------|---|-----|-------|
|                     |             |             |                |      |   |      | Limits   |   |     |       |
| 1-Methylnaphthalene | 1.98        | 1.97        |                | ug/L |   | 100  | 70 - 130 | 2 | 20  |       |
| 2,4'-DDD            | 1.98        | 2.00        |                | ug/L |   | 101  | 70 - 130 | 1 | 20  |       |
| 2,4'-DDE            | 1.98        | 2.00        |                | ug/L |   | 101  | 70 - 130 | 3 | 20  |       |
| 2,4'-DDT            | 1.98        | 2.00        |                | ug/L |   | 101  | 70 - 130 | 0 | 20  |       |
| 2,4-Dinitrotoluene  | 1.98        | 1.72        |                | ug/L |   | 87   | 70 - 130 | 9 | 20  |       |
| 2,6-Dinitrotoluene  | 1.98        | 1.77        |                | ug/L |   | 89   | 70 - 130 | 6 | 20  |       |
| 2-Methylnaphthalene | 1.98        | 1.95        |                | ug/L |   | 99   | 70 - 130 | 0 | 20  |       |
| 4,4'-DDD            | 1.98        | 2.03        |                | ug/L |   | 103  | 70 - 130 | 1 | 20  |       |
| 4,4'-DDE            | 1.98        | 1.96        |                | ug/L |   | 99   | 70 - 130 | 1 | 20  |       |
| 4,4'-DDT            | 1.98        | 2.01        |                | ug/L |   | 102  | 70 - 130 | 2 | 20  |       |
| Acenaphthene        | 1.98        | 1.95        |                | ug/L |   | 98   | 70 - 130 | 1 | 20  |       |
| Acenaphthylene      | 1.98        | 1.97        |                | ug/L |   | 100  | 70 - 130 | 3 | 20  |       |
| Acetochlor          | 1.98        | 2.07        |                | ug/L |   | 104  | 70 - 130 | 2 | 20  |       |
| Alachlor            | 1.98        | 2.09        |                | ug/L |   | 105  | 70 - 130 | 1 | 20  |       |
| alpha-BHC           | 1.98        | 1.99        |                | ug/L |   | 100  | 70 - 130 | 1 | 20  |       |
| alpha-Chlordane     | 1.98        | 2.02        |                | ug/L |   | 102  | 70 - 130 | 0 | 20  |       |
| Anthracene          | 1.98        | 1.85        |                | ug/L |   | 93   | 70 - 130 | 1 | 20  |       |
| Atrazine            | 1.98        | 2.17        |                | ug/L |   | 110  | 70 - 130 | 2 | 20  |       |

Eurofins Eaton Analytical Pomona

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-119846/24-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                          | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec     |     | RPD | Limit |
|----------------------------------|-------------|-------------|----------------|------|---|------|----------|-----|-----|-------|
|                                  |             |             |                |      |   |      | Limits   | RPD |     |       |
| Benz(a)anthracene                | 1.98        | 1.88        |                | ug/L |   | 95   | 70 - 130 | 0   | 20  |       |
| Benzo[a]pyrene                   | 1.98        | 1.81        |                | ug/L |   | 91   | 70 - 130 | 0   | 20  |       |
| Benzo[b]fluoranthene             | 1.98        | 2.06        |                | ug/L |   | 104  | 70 - 130 | 1   | 20  |       |
| Benzo[g,h,i]perylene             | 1.98        | 2.13        |                | ug/L |   | 108  | 70 - 130 | 4   | 20  |       |
| Benzo[k]fluoranthene             | 1.98        | 2.04        |                | ug/L |   | 103  | 70 - 130 | 1   | 20  |       |
| beta-BHC                         | 1.98        | 2.06        |                | ug/L |   | 104  | 70 - 130 | 2   | 20  |       |
| Bis(2-ethylhexyl) phthalate      | 1.98        | 2.24        |                | ug/L |   | 113  | 70 - 130 | 5   | 20  |       |
| Bromacil                         | 1.98        | 1.95        |                | ug/L |   | 99   | 70 - 130 | 3   | 20  |       |
| Butachlor                        | 1.98        | 2.12        |                | ug/L |   | 107  | 70 - 130 | 0   | 20  |       |
| Butylbenzylphthalate             | 1.98        | 2.31        |                | ug/L |   | 116  | 70 - 130 | 4   | 20  |       |
| Chlorobenzilate                  | 1.98        | 1.90        |                | ug/L |   | 96   | 70 - 130 | 9   | 20  |       |
| Chloroneb                        | 1.98        | 2.19        |                | ug/L |   | 111  | 70 - 130 | 4   | 20  |       |
| Chlorothalonil (Draconil, Bravo) | 1.98        | 2.18        |                | ug/L |   | 110  | 70 - 130 | 4   | 20  |       |
| Chlorpyrifos                     | 1.98        | 2.10        |                | ug/L |   | 106  | 70 - 130 | 1   | 20  |       |
| Chrysene                         | 1.98        | 1.99        |                | ug/L |   | 101  | 70 - 130 | 0   | 20  |       |
| delta-BHC                        | 1.98        | 2.10        |                | ug/L |   | 106  | 70 - 130 | 5   | 20  |       |
| Di(2-ethylhexyl)adipate          | 1.98        | 2.01        |                | ug/L |   | 102  | 70 - 130 | 1   | 20  |       |
| Dibenz(a,h)anthracene            | 1.98        | 1.93        |                | ug/L |   | 97   | 70 - 130 | 1   | 20  |       |
| Diclorvos (DDVP)                 | 1.98        | 1.95        |                | ug/L |   | 99   | 70 - 130 | 2   | 20  |       |
| Dieldrin                         | 1.98        | 1.98        |                | ug/L |   | 100  | 70 - 130 | 1   | 20  |       |
| Diethylphthalate                 | 1.98        | 2.08        |                | ug/L |   | 105  | 70 - 130 | 2   | 20  |       |
| Dimethylphthalate                | 1.98        | 2.09        |                | ug/L |   | 105  | 70 - 130 | 3   | 20  |       |
| Di-n-butyl phthalate             | 3.96        | 4.23        |                | ug/L |   | 107  | 70 - 130 | 1   | 20  |       |
| Di-n-octyl phthalate             | 1.98        | 1.76        |                | ug/L |   | 89   | 70 - 130 | 5   | 20  |       |
| Endosulfan I (Alpha)             | 1.98        | 1.96        |                | ug/L |   | 99   | 70 - 130 | 0   | 20  |       |
| Endosulfan II (Beta)             | 1.98        | 1.98        |                | ug/L |   | 100  | 70 - 130 | 1   | 20  |       |
| Endosulfan sulfate               | 1.98        | 2.01        |                | ug/L |   | 101  | 70 - 130 | 1   | 20  |       |
| Endrin                           | 1.98        | 1.84        |                | ug/L |   | 93   | 70 - 130 | 3   | 20  |       |
| Endrin aldehyde                  | 1.98        | 1.90        |                | ug/L |   | 96   | 60 - 130 | 2   | 20  |       |
| EPTC                             | 1.98        | 2.05        |                | ug/L |   | 104  | 70 - 130 | 2   | 20  |       |
| Fluoranthene                     | 1.98        | 2.10        |                | ug/L |   | 106  | 70 - 130 | 1   | 20  |       |
| Fluorene                         | 1.98        | 2.07        |                | ug/L |   | 105  | 70 - 130 | 2   | 20  |       |
| gamma-Chlordane                  | 1.98        | 2.00        |                | ug/L |   | 101  | 70 - 130 | 1   | 20  |       |
| Heptachlor                       | 1.98        | 1.93        |                | ug/L |   | 97   | 70 - 130 | 1   | 20  |       |
| Heptachlor epoxide (isomer B)    | 1.98        | 1.96        |                | ug/L |   | 99   | 70 - 130 | 1   | 20  |       |
| Hexachlorobenzene                | 1.98        | 1.90        |                | ug/L |   | 96   | 70 - 130 | 2   | 20  |       |
| Hexachlorocyclopentadiene        | 1.98        | 1.85        |                | ug/L |   | 93   | 70 - 130 | 0   | 20  |       |
| Indeno[1,2,3-cd]pyrene           | 1.98        | 2.16        |                | ug/L |   | 109  | 70 - 130 | 8   | 20  |       |
| Isophorone                       | 1.98        | 1.96        |                | ug/L |   | 99   | 70 - 130 | 2   | 20  |       |
| Lindane                          | 1.98        | 1.86        |                | ug/L |   | 94   | 70 - 130 | 1   | 20  |       |
| Malathion                        | 1.98        | 2.02        |                | ug/L |   | 102  | 70 - 130 | 2   | 20  |       |
| Methoxychlor                     | 1.98        | 1.85        |                | ug/L |   | 93   | 70 - 130 | 1   | 20  |       |
| Metolachlor                      | 1.98        | 2.09        |                | ug/L |   | 106  | 70 - 130 | 0   | 20  |       |
| Molinate                         | 1.98        | 2.08        |                | ug/L |   | 105  | 70 - 130 | 2   | 20  |       |
| Naphthalene                      | 1.98        | 1.98        |                | ug/L |   | 100  | 70 - 130 | 2   | 20  |       |
| Parathion                        | 1.98        | 1.92        |                | ug/L |   | 97   | 70 - 130 | 1   | 20  |       |
| Pendimethalin (Penoxaline)       | 1.98        | 1.82        |                | ug/L |   | 92   | 70 - 130 | 1   | 20  |       |
| Phenanthrene                     | 1.98        | 1.90        |                | ug/L |   | 96   | 70 - 130 | 0   | 20  |       |
| Propachlor                       | 1.98        | 2.03        |                | ug/L |   | 103  | 70 - 130 | 1   | 20  |       |

Eurofins Eaton Analytical Pomona

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-119846/24-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119846

| Analyte         | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec     |     | RPD | Limit |
|-----------------|-------------|-------------|----------------|------|---|------|----------|-----|-----|-------|
|                 |             |             |                |      |   |      | Limits   | RPD |     |       |
| Pyrene          | 1.98        | 2.08        |                | ug/L |   | 105  | 70 - 130 | 0   | 20  |       |
| Simazine        | 1.98        | 2.15        |                | ug/L |   | 109  | 70 - 130 | 1   | 20  |       |
| Terbacil        | 1.98        | 1.98        |                | ug/L |   | 100  | 70 - 130 | 4   | 20  |       |
| Terbutylazine   | 1.98        | 2.14        |                | ug/L |   | 108  | 70 - 130 | 3   | 20  |       |
| Thiobencarb     | 1.98        | 2.07        |                | ug/L |   | 104  | 70 - 130 | 1   | 20  |       |
| trans-Nonachlor | 1.98        | 1.98        |                | ug/L |   | 100  | 70 - 130 | 0   | 20  |       |
| Trifluralin     | 1.98        | 1.80        |                | ug/L |   | 91   | 70 - 130 | 5   | 20  |       |

| Surrogate          | LCSD      |           | Limits   |
|--------------------|-----------|-----------|----------|
|                    | %Recovery | Qualifier |          |
| 2-Nitro-m-xylene   | 97        |           | 70 - 130 |
| Perylene-d12       | 94        |           | 70 - 130 |
| Triphenylphosphate | 100       |           | 70 - 130 |

Lab Sample ID: MRL 380-119846/22-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                     | Spike Added | MRL Result | MRL Qualifier | Unit | D | %Rec | %Rec     |     |
|-----------------------------|-------------|------------|---------------|------|---|------|----------|-----|
|                             |             |            |               |      |   |      | Limits   | RPD |
| 1-Methylnaphthalene         | 0.0993      | 0.114      |               | ug/L |   | 115  | 50 - 150 |     |
| 2,4'-DDD                    | 0.0993      | 0.0939     | J             | ug/L |   | 95   | 50 - 150 |     |
| 2,4'-DDE                    | 0.0993      | 0.104      |               | ug/L |   | 104  | 50 - 150 |     |
| 2,4'-DDT                    | 0.0993      | 0.0969     | J             | ug/L |   | 98   | 50 - 150 |     |
| 2,4-Dinitrotoluene          | 0.0993      | 0.0956     | J             | ug/L |   | 96   | 50 - 150 |     |
| 2,6-Dinitrotoluene          | 0.0993      | 0.0914     | J             | ug/L |   | 92   | 50 - 150 |     |
| 2-Methylnaphthalene         | 0.0993      | 0.105      |               | ug/L |   | 106  | 50 - 150 |     |
| 4,4'-DDD                    | 0.0993      | 0.104      |               | ug/L |   | 104  | 50 - 150 |     |
| 4,4'-DDE                    | 0.0993      | 0.0989     | J             | ug/L |   | 100  | 50 - 150 |     |
| 4,4'-DDT                    | 0.0993      | 0.0914     | J             | ug/L |   | 92   | 50 - 150 |     |
| Acenaphthene                | 0.0993      | 0.0994     |               | ug/L |   | 100  | 50 - 150 |     |
| Acenaphthylene              | 0.0993      | 0.0922     | J             | ug/L |   | 93   | 50 - 150 |     |
| Acetochlor                  | 0.0993      | 0.109      |               | ug/L |   | 110  | 50 - 150 |     |
| Alachlor                    | 0.0496      | 0.0506     |               | ug/L |   | 102  | 50 - 150 |     |
| alpha-BHC                   | 0.0993      | 0.107      |               | ug/L |   | 108  | 50 - 150 |     |
| alpha-Chlordane             | 0.0248      | <0.029     |               | ug/L |   | 105  | 50 - 150 |     |
| Anthracene                  | 0.0199      | 0.0208     |               | ug/L |   | 105  | 50 - 150 |     |
| Atrazine                    | 0.0496      | 0.0518     |               | ug/L |   | 104  | 50 - 150 |     |
| Benz(a)anthracene           | 0.0496      | 0.0507     |               | ug/L |   | 102  | 50 - 150 |     |
| Benzo[a]pyrene              | 0.0199      | 0.0196     | J             | ug/L |   | 99   | 50 - 150 |     |
| Benzo[b]fluoranthene        | 0.0199      | 0.0194     | J             | ug/L |   | 98   | 50 - 150 |     |
| Benzo[g,h,i]perylene        | 0.0496      | 0.0397     | J             | ug/L |   | 80   | 50 - 150 |     |
| Benzo[k]fluoranthene        | 0.0199      | 0.0190     | J             | ug/L |   | 96   | 50 - 150 |     |
| beta-BHC                    | 0.0993      | 0.120      |               | ug/L |   | 121  | 50 - 150 |     |
| Bis(2-ethylhexyl) phthalate | 0.596       | 0.519      | J             | ug/L |   | 87   | 50 - 150 |     |
| Bromacil                    | 0.0993      | 0.0927     | J             | ug/L |   | 93   | 50 - 150 |     |
| Butachlor                   | 0.0496      | 0.0532     |               | ug/L |   | 107  | 50 - 150 |     |
| Butylbenzylphthalate        | 0.496       | 0.539      |               | ug/L |   | 109  | 50 - 150 |     |
| Chlorobenzilate             | 0.0993      | 0.0980     | J             | ug/L |   | 99   | 50 - 150 |     |
| Chloroneb                   | 0.0993      | 0.0972     | J             | ug/L |   | 98   | 50 - 150 |     |

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-119846/22-A

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                          | Spike   | MRL    | MRL       | Unit | D | %Rec | %Rec Limits |
|----------------------------------|---------|--------|-----------|------|---|------|-------------|
|                                  | Added   | Result | Qualifier |      |   |      |             |
| Chlorothalonil (Draconil, Bravo) | 0.0993  | 0.0856 | J         | ug/L |   | 86   | 50 - 150    |
| Chlorpyrifos                     | 0.0496  | 0.0443 | J         | ug/L |   | 89   | 50 - 150    |
| Chrysene                         | 0.0199  | 0.0227 |           | ug/L |   | 115  | 50 - 150    |
| delta-BHC                        | 0.0993  | 0.117  |           | ug/L |   | 118  | 50 - 150    |
| Di(2-ethylhexyl)adipate          | 0.596   | 0.562  | J         | ug/L |   | 94   | 50 - 150    |
| Dibenz(a,h)anthracene            | 0.0496  | 0.0452 | J         | ug/L |   | 91   | 50 - 150    |
| Diclorvos (DDVP)                 | 0.0496  | 0.0530 |           | ug/L |   | 107  | 50 - 150    |
| Dieldrin                         | 0.00993 | 0.0127 |           | ug/L |   | 128  | 50 - 150    |
| Diethylphthalate                 | 0.496   | 0.528  |           | ug/L |   | 106  | 50 - 150    |
| Dimethylphthalate                | 0.496   | 0.523  |           | ug/L |   | 105  | 50 - 150    |
| Di-n-butyl phthalate             | 0.496   | 0.586  | J         | ug/L |   | 118  | 49 - 243    |
| Di-n-octyl phthalate             | 0.0993  | 0.0852 | J         | ug/L |   | 86   | 50 - 150    |
| Endosulfan I (Alpha)             | 0.0993  | 0.0935 | J         | ug/L |   | 94   | 50 - 150    |
| Endosulfan II (Beta)             | 0.0993  | 0.105  |           | ug/L |   | 106  | 50 - 150    |
| Endosulfan sulfate               | 0.0993  | 0.0910 | J         | ug/L |   | 92   | 50 - 150    |
| Endrin                           | 0.00993 | 0.0109 |           | ug/L |   | 110  | 50 - 150    |
| Endrin aldehyde                  | 0.0993  | 0.106  |           | ug/L |   | 107  | 50 - 150    |
| EPTC                             | 0.0993  | 0.0947 | J         | ug/L |   | 95   | 50 - 150    |
| Fluoranthene                     | 0.0993  | 0.0990 |           | ug/L |   | 100  | 50 - 150    |
| Fluorene                         | 0.0496  | 0.0520 |           | ug/L |   | 105  | 50 - 150    |
| gamma-Chlordane                  | 0.0248  | <0.021 |           | ug/L |   | 84   | 50 - 150    |
| Heptachlor                       | 0.00993 | 0.0138 |           | ug/L |   | 139  | 50 - 150    |
| Heptachlor epoxide (isomer B)    | 0.00993 | 0.0121 |           | ug/L |   | 121  | 50 - 150    |
| Hexachlorobenzene                | 0.0496  | 0.0491 | J         | ug/L |   | 99   | 50 - 150    |
| Hexachlorocyclopentadiene        | 0.0496  | 0.0437 | J         | ug/L |   | 88   | 50 - 150    |
| Indeno[1,2,3-cd]pyrene           | 0.0496  | 0.0354 | J         | ug/L |   | 71   | 50 - 150    |
| Isophorone                       | 0.0993  | 0.120  |           | ug/L |   | 121  | 50 - 150    |
| Lindane                          | 0.00993 | 0.0175 | ^3+       | ug/L |   | 177  | 50 - 150    |
| Malathion                        | 0.0993  | 0.0773 | J         | ug/L |   | 78   | 50 - 150    |
| Methoxychlor                     | 0.0496  | 0.0494 | J         | ug/L |   | 100  | 50 - 150    |
| Metolachlor                      | 0.0496  | 0.0547 |           | ug/L |   | 110  | 50 - 150    |
| Molinate                         | 0.0993  | 0.103  |           | ug/L |   | 103  | 50 - 150    |
| Naphthalene                      | 0.0993  | 0.117  |           | ug/L |   | 118  | 50 - 150    |
| Parathion                        | 0.0993  | 0.0768 | J         | ug/L |   | 77   | 50 - 150    |
| Pendimethalin (Penoxaline)       | 0.0993  | 0.0819 | J         | ug/L |   | 82   | 50 - 150    |
| Phenanthrene                     | 0.0397  | 0.0424 |           | ug/L |   | 107  | 50 - 150    |
| Propachlor                       | 0.0496  | 0.0505 |           | ug/L |   | 102  | 50 - 150    |
| Pyrene                           | 0.0496  | 0.0505 |           | ug/L |   | 102  | 50 - 150    |
| Simazine                         | 0.0496  | 0.0533 |           | ug/L |   | 107  | 50 - 150    |
| Terbacil                         | 0.0993  | 0.0847 | J         | ug/L |   | 85   | 50 - 150    |
| Terbutylazine                    | 0.0993  | 0.105  |           | ug/L |   | 106  | 50 - 150    |
| Thiobencarb                      | 0.0993  | 0.0979 | J         | ug/L |   | 99   | 50 - 150    |
| trans-Nonachlor                  | 0.0248  | <0.026 |           | ug/L |   | 103  | 50 - 150    |
| Trifluralin                      | 0.0993  | 0.0887 | J         | ug/L |   | 89   | 50 - 150    |

| Surrogate        | MRL       |           | Limits   |
|------------------|-----------|-----------|----------|
|                  | %Recovery | Qualifier |          |
| 2-Nitro-m-xylene | 97        |           | 70 - 130 |
| Perylene-d12     | 90        |           | 70 - 130 |

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MRL 380-119846/22-A**  
**Matrix: Water**  
**Analysis Batch: 120072**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 119846**

| <i>Surrogate</i>   | <i>%Recovery</i> | <i>MRL MRL Qualifier</i> | <i>Limits</i> |
|--------------------|------------------|--------------------------|---------------|
| Triphenylphosphate | 99               |                          | 70 - 130      |

**Lab Sample ID: 380-122132-AD-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 120072**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 119846**

| Analyte                          | Sample  | Sample    | Spike | MS     | MS        | Unit | D | %Rec | %Rec Limits |
|----------------------------------|---------|-----------|-------|--------|-----------|------|---|------|-------------|
|                                  | Result  | Qualifier | Added | Result | Qualifier |      |   |      |             |
| 1-Methylnaphthalene              | <0.096  |           | 1.91  | 1.85   |           | ug/L |   | 96   | 70 - 130    |
| 2,4'-DDD                         | <0.096  |           | 1.91  | 1.94   |           | ug/L |   | 102  | 70 - 130    |
| 2,4'-DDE                         | <0.096  |           | 1.91  | 1.89   |           | ug/L |   | 99   | 70 - 130    |
| 2,4'-DDT                         | <0.096  |           | 1.91  | 1.85   |           | ug/L |   | 97   | 70 - 130    |
| 2,4-Dinitrotoluene               | <0.096  |           | 1.91  | 1.74   |           | ug/L |   | 91   | 70 - 130    |
| 2,6-Dinitrotoluene               | <0.096  |           | 1.91  | 1.72   |           | ug/L |   | 90   | 70 - 130    |
| 2-Methylnaphthalene              | <0.096  |           | 1.91  | 1.87   |           | ug/L |   | 98   | 70 - 130    |
| 4,4'-DDD                         | <0.096  |           | 1.91  | 1.99   |           | ug/L |   | 104  | 70 - 130    |
| 4,4'-DDE                         | <0.096  |           | 1.91  | 1.82   |           | ug/L |   | 95   | 70 - 130    |
| 4,4'-DDT                         | <0.096  |           | 1.91  | 1.86   |           | ug/L |   | 97   | 70 - 130    |
| Acenaphthene                     | <0.096  |           | 1.91  | 1.85   |           | ug/L |   | 97   | 70 - 130    |
| Acenaphthylene                   | <0.096  |           | 1.91  | 1.91   |           | ug/L |   | 100  | 70 - 130    |
| Acetochlor                       | <0.096  |           | 1.91  | 2.00   |           | ug/L |   | 105  | 70 - 130    |
| Alachlor                         | <0.048  |           | 1.91  | 2.03   |           | ug/L |   | 106  | 70 - 130    |
| alpha-BHC                        | <0.096  |           | 1.91  | 1.94   |           | ug/L |   | 102  | 70 - 130    |
| alpha-Chlordane                  | <0.048  |           | 1.91  | 1.97   |           | ug/L |   | 103  | 70 - 130    |
| Anthracene                       | <0.019  |           | 1.91  | 1.58   |           | ug/L |   | 83   | 70 - 130    |
| Atrazine                         | <0.048  |           | 1.91  | 2.11   |           | ug/L |   | 110  | 70 - 130    |
| Benz(a)anthracene                | <0.048  |           | 1.91  | 1.79   |           | ug/L |   | 93   | 70 - 130    |
| Benzo[a]pyrene                   | <0.019  |           | 1.91  | 1.60   |           | ug/L |   | 83   | 70 - 130    |
| Benzo[b]fluoranthene             | <0.019  |           | 1.91  | 1.96   |           | ug/L |   | 102  | 70 - 130    |
| Benzo[g,h,i]perylene             | <0.048  |           | 1.91  | 1.82   |           | ug/L |   | 95   | 70 - 130    |
| Benzo[k]fluoranthene             | <0.019  |           | 1.91  | 1.75   |           | ug/L |   | 92   | 70 - 130    |
| beta-BHC                         | <0.096  |           | 1.91  | 1.97   |           | ug/L |   | 103  | 70 - 130    |
| Bis(2-ethylhexyl) phthalate      | <0.58   |           | 1.91  | 1.72   |           | ug/L |   | 90   | 70 - 130    |
| Bromacil                         | <0.096  |           | 1.91  | 1.94   |           | ug/L |   | 101  | 70 - 130    |
| Butachlor                        | <0.048  |           | 1.91  | 2.15   |           | ug/L |   | 112  | 70 - 130    |
| Butylbenzylphthalate             | <0.48   |           | 1.91  | 2.27   |           | ug/L |   | 118  | 70 - 130    |
| Chlorobenzilate                  | <0.096  |           | 1.91  | 1.70   |           | ug/L |   | 89   | 70 - 130    |
| Chloroneb                        | <0.096  |           | 1.91  | 2.03   |           | ug/L |   | 106  | 70 - 130    |
| Chlorothalonil (Draconil, Bravo) | <0.096  |           | 1.91  | 2.15   |           | ug/L |   | 112  | 70 - 130    |
| Chlorpyrifos                     | <0.048  |           | 1.91  | 2.02   |           | ug/L |   | 106  | 70 - 130    |
| Chrysene                         | <0.019  |           | 1.91  | 1.83   |           | ug/L |   | 96   | 70 - 130    |
| delta-BHC                        | <0.096  |           | 1.91  | 1.93   |           | ug/L |   | 101  | 70 - 130    |
| Di(2-ethylhexyl)adipate          | <0.58   |           | 1.91  | 1.72   |           | ug/L |   | 90   | 70 - 130    |
| Dibenz(a,h)anthracene            | <0.048  |           | 1.91  | 1.61   |           | ug/L |   | 84   | 70 - 130    |
| Diclorvos (DDVP)                 | <0.048  |           | 1.91  | 1.96   |           | ug/L |   | 103  | 70 - 130    |
| Dieldrin                         | <0.0096 |           | 1.91  | 1.89   |           | ug/L |   | 99   | 70 - 130    |
| Diethylphthalate                 | <0.48   |           | 1.91  | 2.03   |           | ug/L |   | 106  | 70 - 130    |
| Dimethylphthalate                | <0.48   |           | 1.91  | 2.02   |           | ug/L |   | 106  | 70 - 130    |
| Di-n-butyl phthalate             | <0.96   |           | 3.83  | 4.04   |           | ug/L |   | 106  | 70 - 130    |



# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 380-122132-AD-1-A MS**

**Client Sample ID: Matrix Spike**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 120072**

**Prep Batch: 119846**

| Analyte                       | Sample  | Sample    | Spike | MS     | MS        | Unit | D | %Rec | %Rec<br>Limits |
|-------------------------------|---------|-----------|-------|--------|-----------|------|---|------|----------------|
|                               | Result  | Qualifier | Added | Result | Qualifier |      |   |      |                |
| Di-n-octyl phthalate          | <0.096  |           | 1.91  | 1.36   |           | ug/L |   | 71   | 70 - 130       |
| Endosulfan I (Alpha)          | <0.096  |           | 1.91  | 1.91   |           | ug/L |   | 100  | 70 - 130       |
| Endosulfan II (Beta)          | <0.096  |           | 1.91  | 1.94   |           | ug/L |   | 101  | 70 - 130       |
| Endosulfan sulfate            | <0.096  |           | 1.91  | 1.95   |           | ug/L |   | 102  | 70 - 130       |
| Endrin                        | <0.0096 |           | 1.91  | 1.79   |           | ug/L |   | 94   | 70 - 130       |
| Endrin aldehyde               | <0.096  |           | 1.91  | 1.29   |           | ug/L |   | 67   | 60 - 130       |
| EPTC                          | <0.096  |           | 1.91  | 1.96   |           | ug/L |   | 102  | 70 - 130       |
| Fluoranthene                  | <0.096  |           | 1.91  | 2.03   |           | ug/L |   | 106  | 70 - 130       |
| Fluorene                      | <0.048  |           | 1.91  | 1.96   |           | ug/L |   | 103  | 70 - 130       |
| gamma-Chlordane               | <0.048  |           | 1.91  | 1.91   |           | ug/L |   | 100  | 70 - 130       |
| Heptachlor                    | <0.0096 |           | 1.91  | 1.81   |           | ug/L |   | 95   | 70 - 130       |
| Heptachlor epoxide (isomer B) | <0.0096 |           | 1.91  | 1.91   |           | ug/L |   | 100  | 70 - 130       |
| Hexachlorobenzene             | <0.048  |           | 1.91  | 1.78   |           | ug/L |   | 93   | 70 - 130       |
| Hexachlorocyclopentadiene     | <0.048  |           | 1.91  | 1.77   |           | ug/L |   | 92   | 70 - 130       |
| Indeno[1,2,3-cd]pyrene        | <0.048  |           | 1.91  | 1.80   |           | ug/L |   | 94   | 70 - 130       |
| Isophorone                    | <0.096  |           | 1.91  | 1.91   |           | ug/L |   | 100  | 70 - 130       |
| Lindane                       | <0.0096 | ^3+       | 1.91  | 1.79   |           | ug/L |   | 93   | 70 - 130       |
| Malathion                     | <0.096  |           | 1.91  | 2.02   |           | ug/L |   | 106  | 70 - 130       |
| Methoxychlor                  | <0.048  |           | 1.91  | 1.87   |           | ug/L |   | 98   | 70 - 130       |
| Metolachlor                   | <0.048  |           | 1.91  | 2.03   |           | ug/L |   | 106  | 70 - 130       |
| Molinate                      | <0.096  |           | 1.91  | 2.00   |           | ug/L |   | 105  | 70 - 130       |
| Naphthalene                   | <0.096  |           | 1.91  | 1.87   |           | ug/L |   | 98   | 70 - 130       |
| Parathion                     | <0.096  |           | 1.91  | 1.92   |           | ug/L |   | 100  | 70 - 130       |
| Pendimethalin (Penoxaline)    | <0.096  |           | 1.91  | 1.83   |           | ug/L |   | 96   | 70 - 130       |
| Phenanthrene                  | <0.038  |           | 1.91  | 1.82   |           | ug/L |   | 95   | 70 - 130       |
| Propachlor                    | <0.048  |           | 1.91  | 2.01   |           | ug/L |   | 105  | 70 - 130       |
| Pyrene                        | <0.048  |           | 1.91  | 2.01   |           | ug/L |   | 105  | 70 - 130       |
| Simazine                      | <0.048  |           | 1.91  | 2.15   |           | ug/L |   | 112  | 70 - 130       |
| Terbacil                      | <0.096  |           | 1.91  | 2.05   |           | ug/L |   | 107  | 70 - 130       |
| Terbutylazine                 | <0.096  |           | 1.91  | 2.11   |           | ug/L |   | 110  | 70 - 130       |
| Thiobencarb                   | <0.096  |           | 1.91  | 2.04   |           | ug/L |   | 107  | 70 - 130       |
| trans-Nonachlor               | <0.048  |           | 1.91  | 1.89   |           | ug/L |   | 99   | 70 - 130       |
| Trifluralin                   | <0.096  |           | 1.91  | 1.77   |           | ug/L |   | 93   | 70 - 130       |

| Surrogate          | MS MS     |           | Limits   |
|--------------------|-----------|-----------|----------|
|                    | %Recovery | Qualifier |          |
| 2-Nitro-m-xylene   | 96        |           | 70 - 130 |
| Perylene-d12       | 96        |           | 70 - 130 |
| Triphenylphosphate | 104       |           | 70 - 130 |

**Lab Sample ID: 380-121839-R-1-A DU**

**Client Sample ID: Duplicate**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 120072**

**Prep Batch: 119846**

| Analyte             | Sample | Sample    | DU     | DU        | Unit | D | RPD | RPD | Limit |
|---------------------|--------|-----------|--------|-----------|------|---|-----|-----|-------|
|                     | Result | Qualifier | Result | Qualifier |      |   |     |     |       |
| 1-Methylnaphthalene | <0.097 |           | <0.096 |           | ug/L |   | NC  | 20  |       |
| 2,4'-DDD            | <0.097 |           | <0.096 |           | ug/L |   | NC  | 20  |       |
| 2,4'-DDE            | <0.097 |           | <0.096 |           | ug/L |   | NC  | 20  |       |
| 2,4'-DDT            | <0.097 |           | <0.096 |           | ug/L |   | NC  | 20  |       |

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# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-121839-R-1-A DU

Matrix: Water

Analysis Batch: 120072

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 119846

| Analyte                          | Sample  | Sample    | DU      | DU        | Unit | D | RPD | Limit |
|----------------------------------|---------|-----------|---------|-----------|------|---|-----|-------|
|                                  | Result  | Qualifier | Result  | Qualifier |      |   |     |       |
| 2,4-Dinitrotoluene               | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| 2,6-Dinitrotoluene               | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| 2-Methylnaphthalene              | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| 4,4'-DDD                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| 4,4'-DDE                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| 4,4'-DDT                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Acenaphthene                     | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Acenaphthylene                   | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Acetochlor                       | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Alachlor                         | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| alpha-BHC                        | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| alpha-Chlordane                  | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Anthracene                       | <0.019  |           | <0.019  |           | ug/L |   | NC  | 20    |
| Atrazine                         | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Benz(a)anthracene                | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Benzo[a]pyrene                   | <0.019  |           | <0.019  |           | ug/L |   | NC  | 20    |
| Benzo[b]fluoranthene             | <0.019  |           | <0.019  |           | ug/L |   | NC  | 20    |
| Benzo[g,h,i]perylene             | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Benzo[k]fluoranthene             | <0.019  |           | <0.019  |           | ug/L |   | NC  | 20    |
| beta-BHC                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Bis(2-ethylhexyl) phthalate      | <0.58   |           | <0.58   |           | ug/L |   | NC  | 20    |
| Bromacil                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Butachlor                        | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Butylbenzylphthalate             | <0.48   |           | <0.48   |           | ug/L |   | NC  | 20    |
| Chlorobenzilate                  | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Chloroneb                        | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Chlorothalonil (Draconil, Bravo) | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Chlorpyrifos                     | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Chrysene                         | <0.019  |           | <0.019  |           | ug/L |   | NC  | 20    |
| delta-BHC                        | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Di(2-ethylhexyl)adipate          | <0.58   |           | <0.58   |           | ug/L |   | NC  | 20    |
| Dibenz(a,h)anthracene            | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Diclorvos (DDVP)                 | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Dieldrin                         | <0.0097 |           | <0.0096 |           | ug/L |   | NC  | 20    |
| Diethylphthalate                 | <0.48   |           | <0.48   |           | ug/L |   | NC  | 20    |
| Dimethylphthalate                | 1.4     |           | 1.34    |           | ug/L |   | 2   | 20    |
| Di-n-butyl phthalate             | <0.97   |           | <0.96   |           | ug/L |   | NC  | 20    |
| Di-n-octyl phthalate             | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Endosulfan I (Alpha)             | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Endosulfan II (Beta)             | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Endosulfan sulfate               | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Endrin                           | <0.0097 |           | <0.0096 |           | ug/L |   | NC  | 20    |
| Endrin aldehyde                  | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| EPTC                             | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Fluoranthene                     | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Fluorene                         | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| gamma-Chlordane                  | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Heptachlor                       | <0.0097 |           | <0.0096 |           | ug/L |   | NC  | 20    |
| Heptachlor epoxide (isomer B)    | <0.0097 |           | <0.0096 |           | ug/L |   | NC  | 20    |

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# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 525.2 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 380-121839-R-1-A DU  
Matrix: Water  
Analysis Batch: 120072

Client Sample ID: Duplicate  
Prep Type: Total/NA  
Prep Batch: 119846

| Analyte                          | Sample  | Sample    | DU      | DU        | Unit | D | RPD | Limit |
|----------------------------------|---------|-----------|---------|-----------|------|---|-----|-------|
|                                  | Result  | Qualifier | Result  | Qualifier |      |   |     |       |
| Hexachlorobenzene                | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Hexachlorocyclopentadiene        | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Indeno[1,2,3-cd]pyrene           | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Isophorone                       | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Lindane                          | <0.0097 | ^3+       | <0.0096 |           | ug/L |   | NC  | 20    |
| Malathion                        | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Methoxychlor                     | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Metolachlor                      | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Molinate                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Naphthalene                      | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Parathion                        | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Pendimethalin (Penoxaline)       | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Phenanthrene                     | <0.039  |           | <0.039  |           | ug/L |   | NC  | 20    |
| Propachlor                       | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Pyrene                           | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Simazine                         | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Terbacil                         | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Terbutylazine                    | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Thiobencarb                      | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |
| Total Permethrin (mixed isomers) | <0.19   |           | <0.19   |           | ug/L |   | NC  | 20    |
| trans-Nonachlor                  | <0.048  |           | <0.048  |           | ug/L |   | NC  | 20    |
| Trifluralin                      | <0.097  |           | <0.096  |           | ug/L |   | NC  | 20    |

| Surrogate          | DU        | DU        | Limits   |
|--------------------|-----------|-----------|----------|
|                    | %Recovery | Qualifier |          |
| 2-Nitro-m-xylene   | 97        |           | 70 - 130 |
| Perylene-d12       | 99        |           | 70 - 130 |
| Triphenylphosphate | 103       |           | 70 - 130 |

## Method: 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-504385/1-A  
Matrix: Water  
Analysis Batch: 509940

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 504385

| Tentatively Identified Compound | MB          | MB        | Unit | D | RT | CAS No. | Prepared       | Analyzed       | Dil Fac |
|---------------------------------|-------------|-----------|------|---|----|---------|----------------|----------------|---------|
| Tentatively Identified Compound | Est. Result | Qualifier | ug/L |   |    | N/A     | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
|                                 | None        |           |      |   |    |         |                |                |         |

| Surrogate                   | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
|                             | %Recovery | Qualifier |          |                |                |         |
| 2,4,6-Tribromophenol (Surr) | 89        |           | 33 - 139 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
| 2-Fluorobiphenyl (Surr)     | 72        |           | 33 - 126 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
| 2-Fluorophenol (Surr)       | 50        |           | 12 - 120 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
| Nitrobenzene-d5 (Surr)      | 76        |           | 36 - 120 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
| Phenol-d6 (Surr)            | 33        |           | 10 - 120 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |
| p-Terphenyl-d14 (Surr)      | 86        |           | 47 - 131 | 11/18/24 09:17 | 12/04/24 17:40 | 1       |

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM)

**Lab Sample ID: MB 570-504385/1-A**  
**Matrix: Water**  
**Analysis Batch: 506444**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 504385**

| Analyte                | MB     | MB        | RL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|------------------------|--------|-----------|------|------|---|----------------|----------------|---------|
|                        | Result | Qualifier |      |      |   |                |                |         |
| 1-Methylnaphthalene    | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| 2-Methylnaphthalene    | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Acenaphthene           | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Acenaphthylene         | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Anthracene             | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Benzo[a]anthracene     | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Benzo[a]pyrene         | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Benzo[b]fluoranthene   | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Benzo[g,h,i]perylene   | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Benzo[k]fluoranthene   | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Chrysene               | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Dibenz(a,h)anthracene  | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Fluoranthene           | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Fluorene               | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Indeno[1,2,3-cd]pyrene | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Naphthalene            | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Phenanthrene           | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Pyrene                 | <0.20  |           | 0.20 | ug/L |   | 11/18/24 09:17 | 11/22/24 18:47 | 1       |

| Surrogate                   | MB        | MB        | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
|                             | %Recovery | Qualifier |          |                |                |         |
| 2,4,6-Tribromophenol (Surr) | 80        |           | 28 - 127 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| 2-Fluorobiphenyl (Surr)     | 58        |           | 31 - 120 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| 2-Fluorophenol (Surr)       | 48        |           | 17 - 120 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Nitrobenzene-d5 (Surr)      | 64        |           | 27 - 120 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| Phenol-d6 (Surr)            | 28        |           | 10 - 120 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |
| p-Terphenyl-d14 (Surr)      | 66        |           | 45 - 120 | 11/18/24 09:17 | 11/22/24 18:47 | 1       |

**Lab Sample ID: LCS 570-504385/2-A**  
**Matrix: Water**  
**Analysis Batch: 506444**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 504385**

| Analyte                | Spike Added | LCS    | LCS       | Unit | D | %Rec | %Rec Limits |
|------------------------|-------------|--------|-----------|------|---|------|-------------|
|                        |             | Result | Qualifier |      |   |      |             |
| 1-Methylnaphthalene    | 20.0        | 11.7   |           | ug/L |   | 58   | 47 - 120    |
| 2-Methylnaphthalene    | 20.0        | 13.3   |           | ug/L |   | 66   | 43 - 120    |
| Acenaphthene           | 20.0        | 14.6   |           | ug/L |   | 73   | 60 - 132    |
| Acenaphthylene         | 20.0        | 14.3   |           | ug/L |   | 72   | 54 - 126    |
| Anthracene             | 20.0        | 14.8   |           | ug/L |   | 74   | 43 - 120    |
| Benzo[a]anthracene     | 20.0        | 15.3   |           | ug/L |   | 77   | 42 - 133    |
| Benzo[a]pyrene         | 20.0        | 16.5   |           | ug/L |   | 82   | 32 - 148    |
| Benzo[b]fluoranthene   | 20.0        | 15.8   |           | ug/L |   | 79   | 42 - 140    |
| Benzo[g,h,i]perylene   | 20.0        | 14.0   |           | ug/L |   | 70   | 1 - 195     |
| Benzo[k]fluoranthene   | 20.0        | 14.8   |           | ug/L |   | 74   | 25 - 146    |
| Chrysene               | 20.0        | 14.0   |           | ug/L |   | 70   | 44 - 140    |
| Dibenz(a,h)anthracene  | 20.0        | 15.6   |           | ug/L |   | 78   | 1 - 200     |
| Fluoranthene           | 20.0        | 15.5   |           | ug/L |   | 78   | 43 - 121    |
| Fluorene               | 20.0        | 15.5   |           | ug/L |   | 78   | 70 - 120    |
| Indeno[1,2,3-cd]pyrene | 20.0        | 16.2   |           | ug/L |   | 81   | 1 - 151     |
| Naphthalene            | 20.0        | 11.8   |           | ug/L |   | 59   | 36 - 120    |

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# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

**Lab Sample ID: LCS 570-504385/2-A**

**Matrix: Water**

**Analysis Batch: 506444**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 504385**

| Analyte      | Spike Added | LCS    | LCS       | Unit | D | %Rec | %Rec Limits |
|--------------|-------------|--------|-----------|------|---|------|-------------|
|              |             | Result | Qualifier |      |   |      |             |
| Phenanthrene | 20.0        | 14.9   |           | ug/L |   | 74   | 65 - 120    |
| Pyrene       | 20.0        | 14.9   |           | ug/L |   | 74   | 70 - 120    |

| Surrogate                   | LCS       |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 2,4,6-Tribromophenol (Surr) | 87        |           | 28 - 127 |
| 2-Fluorobiphenyl (Surr)     | 72        |           | 31 - 120 |
| 2-Fluorophenol (Surr)       | 58        |           | 17 - 120 |
| Nitrobenzene-d5 (Surr)      | 65        |           | 27 - 120 |
| Phenol-d6 (Surr)            | 34        |           | 10 - 120 |
| p-Terphenyl-d14 (Surr)      | 77        |           | 45 - 120 |

**Lab Sample ID: LCSD 570-504385/3-A**

**Matrix: Water**

**Analysis Batch: 506444**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 504385**

| Analyte                | Spike Added | LCSD   | LCSD      | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|------------------------|-------------|--------|-----------|------|---|------|-------------|-----|-----------|
|                        |             | Result | Qualifier |      |   |      |             |     |           |
| 1-Methylnaphthalene    | 20.0        | 12.2   |           | ug/L |   | 61   | 47 - 120    | 4   | 20        |
| 2-Methylnaphthalene    | 20.0        | 14.1   |           | ug/L |   | 70   | 43 - 120    | 6   | 20        |
| Acenaphthene           | 20.0        | 14.7   |           | ug/L |   | 73   | 60 - 132    | 0   | 29        |
| Acenaphthylene         | 20.0        | 14.2   |           | ug/L |   | 71   | 54 - 126    | 1   | 45        |
| Anthracene             | 20.0        | 16.0   |           | ug/L |   | 80   | 43 - 120    | 7   | 40        |
| Benzo[a]anthracene     | 20.0        | 16.6   |           | ug/L |   | 83   | 42 - 133    | 8   | 32        |
| Benzo[a]pyrene         | 20.0        | 18.3   |           | ug/L |   | 92   | 32 - 148    | 11  | 43        |
| Benzo[b]fluoranthene   | 20.0        | 17.0   |           | ug/L |   | 85   | 42 - 140    | 7   | 43        |
| Benzo[g,h,i]perylene   | 20.0        | 15.1   |           | ug/L |   | 76   | 1 - 195     | 8   | 61        |
| Benzo[k]fluoranthene   | 20.0        | 17.0   |           | ug/L |   | 85   | 25 - 146    | 13  | 38        |
| Chrysene               | 20.0        | 15.5   |           | ug/L |   | 77   | 44 - 140    | 10  | 53        |
| Dibenz(a,h)anthracene  | 20.0        | 16.5   |           | ug/L |   | 83   | 1 - 200     | 6   | 75        |
| Fluoranthene           | 20.0        | 16.7   |           | ug/L |   | 83   | 43 - 121    | 7   | 40        |
| Fluorene               | 20.0        | 15.6   |           | ug/L |   | 78   | 70 - 120    | 0   | 23        |
| Indeno[1,2,3-cd]pyrene | 20.0        | 17.3   |           | ug/L |   | 86   | 1 - 151     | 6   | 60        |
| Naphthalene            | 20.0        | 12.8   |           | ug/L |   | 64   | 36 - 120    | 8   | 39        |
| Phenanthrene           | 20.0        | 15.6   |           | ug/L |   | 78   | 65 - 120    | 5   | 24        |
| Pyrene                 | 20.0        | 16.3   |           | ug/L |   | 82   | 70 - 120    | 9   | 30        |

| Surrogate                   | LCSD      |           | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 2,4,6-Tribromophenol (Surr) | 92        |           | 28 - 127 |
| 2-Fluorobiphenyl (Surr)     | 68        |           | 31 - 120 |
| 2-Fluorophenol (Surr)       | 64        |           | 17 - 120 |
| Nitrobenzene-d5 (Surr)      | 64        |           | 27 - 120 |
| Phenol-d6 (Surr)            | 36        |           | 10 - 120 |
| p-Terphenyl-d14 (Surr)      | 84        |           | 45 - 120 |

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

Lab Sample ID: 380-122227-A-3-A MS

Matrix: Water

Analysis Batch: 506444

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 504385

| Analyte                | Sample | Sample    | Spike | MS     | MS        | Unit | D | %Rec | %Rec Limits |
|------------------------|--------|-----------|-------|--------|-----------|------|---|------|-------------|
|                        | Result | Qualifier | Added | Result | Qualifier |      |   |      |             |
| 1-Methylnaphthalene    | <0.19  |           | 19.1  | 12.4   |           | ug/L |   | 65   | 36 - 120    |
| 2-Methylnaphthalene    | <0.19  |           | 19.1  | 14.2   |           | ug/L |   | 75   | 32 - 124    |
| Acenaphthene           | <0.19  |           | 19.1  | 14.8   |           | ug/L |   | 78   | 47 - 145    |
| Acenaphthylene         | <0.19  |           | 19.1  | 14.4   |           | ug/L |   | 76   | 33 - 145    |
| Anthracene             | <0.19  |           | 19.1  | 15.6   |           | ug/L |   | 82   | 27 - 133    |
| Benzo[a]anthracene     | <0.19  |           | 19.1  | 16.0   |           | ug/L |   | 84   | 33 - 143    |
| Benzo[a]pyrene         | <0.19  |           | 19.1  | 17.5   |           | ug/L |   | 92   | 17 - 163    |
| Benzo[b]fluoranthene   | <0.19  |           | 19.1  | 16.5   |           | ug/L |   | 86   | 24 - 159    |
| Benzo[g,h,i]perylene   | <0.19  |           | 19.1  | 14.7   |           | ug/L |   | 77   | 1 - 219     |
| Benzo[k]fluoranthene   | <0.19  |           | 19.1  | 16.3   |           | ug/L |   | 85   | 11 - 162    |
| Chrysene               | <0.19  |           | 19.1  | 15.0   |           | ug/L |   | 78   | 17 - 168    |
| Dibenz(a,h)anthracene  | <0.19  |           | 19.1  | 16.0   |           | ug/L |   | 84   | 1 - 227     |
| Fluoranthene           | <0.19  |           | 19.1  | 16.5   |           | ug/L |   | 87   | 26 - 137    |
| Fluorene               | <0.19  |           | 19.1  | 15.2   |           | ug/L |   | 80   | 59 - 121    |
| Indeno[1,2,3-cd]pyrene | <0.19  |           | 19.1  | 16.4   |           | ug/L |   | 86   | 1 - 171     |
| Naphthalene            | <0.19  |           | 19.1  | 12.9   |           | ug/L |   | 68   | 21 - 133    |
| Phenanthrene           | <0.19  |           | 19.1  | 15.3   |           | ug/L |   | 80   | 54 - 120    |
| Pyrene                 | <0.19  |           | 19.1  | 15.3   |           | ug/L |   | 80   | 52 - 120    |

| Surrogate                   | MS        | MS        | Limits   |
|-----------------------------|-----------|-----------|----------|
|                             | %Recovery | Qualifier |          |
| 2,4,6-Tribromophenol (Surr) | 96        |           | 28 - 127 |
| 2-Fluorobiphenyl (Surr)     | 74        |           | 31 - 120 |
| 2-Fluorophenol (Surr)       | 67        |           | 17 - 120 |
| Nitrobenzene-d5 (Surr)      | 69        |           | 27 - 120 |
| Phenol-d6 (Surr)            | 34        |           | 10 - 120 |
| p-Terphenyl-d14 (Surr)      | 79        |           | 45 - 120 |

Lab Sample ID: 380-122227-A-3-B MSD

Matrix: Water

Analysis Batch: 506444

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 504385

| Analyte                | Sample | Sample    | Spike | MSD    | MSD       | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|------------------------|--------|-----------|-------|--------|-----------|------|---|------|-------------|-----|-----------|
|                        | Result | Qualifier | Added | Result | Qualifier |      |   |      |             |     |           |
| 1-Methylnaphthalene    | <0.19  |           | 19.2  | 13.1   |           | ug/L |   | 68   | 36 - 120    | 6   | 30        |
| 2-Methylnaphthalene    | <0.19  |           | 19.2  | 15.5   |           | ug/L |   | 80   | 32 - 124    | 8   | 30        |
| Acenaphthene           | <0.19  |           | 19.2  | 16.3   |           | ug/L |   | 84   | 47 - 145    | 9   | 48        |
| Acenaphthylene         | <0.19  |           | 19.2  | 15.8   |           | ug/L |   | 82   | 33 - 145    | 9   | 74        |
| Anthracene             | <0.19  |           | 19.2  | 16.7   |           | ug/L |   | 87   | 27 - 133    | 7   | 66        |
| Benzo[a]anthracene     | <0.19  |           | 19.2  | 17.1   |           | ug/L |   | 89   | 33 - 143    | 6   | 53        |
| Benzo[a]pyrene         | <0.19  |           | 19.2  | 18.5   |           | ug/L |   | 96   | 17 - 163    | 6   | 72        |
| Benzo[b]fluoranthene   | <0.19  |           | 19.2  | 17.6   |           | ug/L |   | 91   | 24 - 159    | 7   | 71        |
| Benzo[g,h,i]perylene   | <0.19  |           | 19.2  | 16.1   |           | ug/L |   | 83   | 1 - 219     | 9   | 97        |
| Benzo[k]fluoranthene   | <0.19  |           | 19.2  | 17.3   |           | ug/L |   | 90   | 11 - 162    | 6   | 63        |
| Chrysene               | <0.19  |           | 19.2  | 15.9   |           | ug/L |   | 83   | 17 - 168    | 6   | 87        |
| Dibenz(a,h)anthracene  | <0.19  |           | 19.2  | 17.4   |           | ug/L |   | 90   | 1 - 227     | 9   | 126       |
| Fluoranthene           | <0.19  |           | 19.2  | 17.9   |           | ug/L |   | 93   | 26 - 137    | 8   | 66        |
| Fluorene               | <0.19  |           | 19.2  | 17.1   |           | ug/L |   | 89   | 59 - 121    | 12  | 38        |
| Indeno[1,2,3-cd]pyrene | <0.19  |           | 19.2  | 18.2   |           | ug/L |   | 95   | 1 - 171     | 10  | 99        |
| Naphthalene            | <0.19  |           | 19.2  | 13.9   |           | ug/L |   | 72   | 21 - 133    | 7   | 65        |

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# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 625.1 SIM - Semivolatile Organic Compounds GC/MS (SIM) (Continued)

**Lab Sample ID: 380-122227-A-3-B MSD**

**Matrix: Water**

**Analysis Batch: 506444**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 504385**

| Analyte                     | Sample           | Sample           | Spike         | MSD    | MSD       | Unit | D | %Rec | %Rec     | RPD | Limit |
|-----------------------------|------------------|------------------|---------------|--------|-----------|------|---|------|----------|-----|-------|
|                             | Result           | Qualifier        | Added         | Result | Qualifier |      |   |      | Limits   |     |       |
| Phenanthrene                | <0.19            |                  | 19.2          | 16.4   |           | ug/L |   | 85   | 54 - 120 | 7   | 39    |
| Pyrene                      | <0.19            |                  | 19.2          | 16.9   |           | ug/L |   | 88   | 52 - 120 | 10  | 49    |
| <b>MSD MSD</b>              |                  |                  |               |        |           |      |   |      |          |     |       |
| <b>Surrogate</b>            | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |        |           |      |   |      |          |     |       |
| 2,4,6-Tribromophenol (Surr) | 91               |                  | 28 - 127      |        |           |      |   |      |          |     |       |
| 2-Fluorobiphenyl (Surr)     | 77               |                  | 31 - 120      |        |           |      |   |      |          |     |       |
| 2-Fluorophenol (Surr)       | 59               |                  | 17 - 120      |        |           |      |   |      |          |     |       |
| Nitrobenzene-d5 (Surr)      | 73               |                  | 27 - 120      |        |           |      |   |      |          |     |       |
| Phenol-d6 (Surr)            | 32               |                  | 10 - 120      |        |           |      |   |      |          |     |       |
| p-Terphenyl-d14 (Surr)      | 83               |                  | 45 - 120      |        |           |      |   |      |          |     |       |

## Method: 8015B GRO LL - Gasoline Range Organics - (GC)

**Lab Sample ID: MB 570-507194/6**

**Matrix: Water**

**Analysis Batch: 507194**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

| Analyte                     | MB               | MB               | RL            | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|-----------------------------|------------------|------------------|---------------|------|---|-----------------|-----------------|----------------|
|                             | Result           | Qualifier        |               |      |   |                 |                 |                |
| GRO (C6-C10)                | <10              |                  | 10            | ug/L |   |                 | 11/25/24 12:14  | 1              |
| <b>MB MB</b>                |                  |                  |               |      |   |                 |                 |                |
| <b>Surrogate</b>            | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |      |   |                 |                 |                |
| 4-Bromofluorobenzene (Surr) | 94               |                  | 38 - 134      |      |   |                 |                 |                |
|                             |                  |                  |               |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
|                             |                  |                  |               |      |   |                 | 11/25/24 12:14  | 1              |

**Lab Sample ID: LCS 570-507194/4**

**Matrix: Water**

**Analysis Batch: 507194**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

| Analyte                          | Spike Added      | LCS              | LCS           | Unit | D | %Rec | %Rec     | RPD | Limit |
|----------------------------------|------------------|------------------|---------------|------|---|------|----------|-----|-------|
|                                  |                  | Result           | Qualifier     |      |   |      | Limits   |     |       |
| Gasoline Range Organics (C4-C13) | 400              | 326              |               | ug/L |   | 82   | 78 - 120 |     |       |
| <b>LCS LCS</b>                   |                  |                  |               |      |   |      |          |     |       |
| <b>Surrogate</b>                 | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |      |   |      |          |     |       |
| 4-Bromofluorobenzene (Surr)      | 96               |                  | 38 - 134      |      |   |      |          |     |       |

**Lab Sample ID: LCSD 570-507194/5**

**Matrix: Water**

**Analysis Batch: 507194**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

| Analyte                          | Spike Added      | LCSD             | LCSD          | Unit | D | %Rec | %Rec     | RPD | Limit |
|----------------------------------|------------------|------------------|---------------|------|---|------|----------|-----|-------|
|                                  |                  | Result           | Qualifier     |      |   |      | Limits   |     |       |
| Gasoline Range Organics (C4-C13) | 400              | 329              |               | ug/L |   | 82   | 78 - 120 | 1   | 10    |
| <b>LCSD LCSD</b>                 |                  |                  |               |      |   |      |          |     |       |
| <b>Surrogate</b>                 | <b>%Recovery</b> | <b>Qualifier</b> | <b>Limits</b> |      |   |      |          |     |       |
| 4-Bromofluorobenzene (Surr)      | 96               |                  | 38 - 134      |      |   |      |          |     |       |

# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 8015B GRO LL - Gasoline Range Organics - (GC) (Continued)

**Lab Sample ID: MRL 570-507194/3**  
**Matrix: Water**  
**Analysis Batch: 507194**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**

| Analyte                          | Spike Added | MRL Result | MRL Qualifier | Unit | D | %Rec | %Rec Limits   |
|----------------------------------|-------------|------------|---------------|------|---|------|---------------|
| Gasoline Range Organics (C4-C13) | 10.0        | 11.4       |               | ug/L |   | 114  | 50 - 150      |
| <b>Surrogate</b>                 |             | <b>MRL</b> | <b>MRL</b>    |      |   |      | <b>Limits</b> |
| 4-Bromofluorobenzene (Surr)      |             | 91         |               |      |   |      | 38 - 134      |

**Lab Sample ID: 380-122227-C-3 MS**  
**Matrix: Water**  
**Analysis Batch: 507194**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**

| Analyte                          | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits   |
|----------------------------------|---------------|------------------|-------------|-----------|--------------|------|---|------|---------------|
| Gasoline Range Organics (C4-C13) | <10           |                  | 400         | 338       |              | ug/L |   | 85   | 68 - 122      |
| <b>Surrogate</b>                 |               | <b>MS</b>        |             | <b>MS</b> |              |      |   |      | <b>Limits</b> |
| 4-Bromofluorobenzene (Surr)      |               | 97               |             |           |              |      |   |      | 38 - 134      |

**Lab Sample ID: 380-122227-C-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 507194**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**

| Analyte                          | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits   | RPD | RPD Limit |
|----------------------------------|---------------|------------------|-------------|------------|---------------|------|---|------|---------------|-----|-----------|
| Gasoline Range Organics (C4-C13) | <10           |                  | 400         | 340        |               | ug/L |   | 85   | 68 - 122      | 1   | 18        |
| <b>Surrogate</b>                 |               | <b>MSD</b>       |             | <b>MSD</b> |               |      |   |      | <b>Limits</b> |     |           |
| 4-Bromofluorobenzene (Surr)      |               | 98               |             |            |               |      |   |      | 38 - 134      |     |           |

## Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level

**Lab Sample ID: MB 570-504083/1-A**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

| Analyte                            | MB Result | MB Qualifier | RL | Unit | D | Prepared        | Analyzed        | Dil Fac        |
|------------------------------------|-----------|--------------|----|------|---|-----------------|-----------------|----------------|
| Diesel Range Organics (C10-C24)    | <25       |              | 25 | ug/L |   | 11/16/24 11:42  | 11/27/24 15:37  | 1              |
| Motor Oil Range Organics [C24-C36] | <25       |              | 25 | ug/L |   | 11/16/24 11:42  | 11/27/24 15:37  | 1              |
| C8-C18                             | <25       |              | 25 | ug/L |   | 11/16/24 11:42  | 11/27/24 15:37  | 1              |
| <b>Surrogate</b>                   |           | <b>MB</b>    |    |      |   | <b>Prepared</b> | <b>Analyzed</b> | <b>Dil Fac</b> |
| n-Octacosane (Surr)                |           | 112          |    |      |   | 11/16/24 11:42  | 11/27/24 15:37  | 1              |

**Lab Sample ID: LCS 570-504083/2-A**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---------|-------------|------------|---------------|------|---|------|-------------|
| C10-C28 | 1600        | 1380       |               | ug/L |   | 86   | 56 - 127    |

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# QC Sample Results

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Method: 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

**Lab Sample ID: LCS 570-504083/2-A**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

|                            | LCS       | LCS       |          |
|----------------------------|-----------|-----------|----------|
| Surrogate                  | %Recovery | Qualifier | Limits   |
| <i>n-Octacosane (Surr)</i> | 112       |           | 60 - 130 |

**Lab Sample ID: LCSD 570-504083/3-A**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

|         | Spike | LCSD   | LCSD      |      |   |      |          |     |       |  |
|---------|-------|--------|-----------|------|---|------|----------|-----|-------|--|
| Analyte | Added | Result | Qualifier | Unit | D | %Rec | Limits   | RPD | Limit |  |
| C10-C28 | 1600  | 1350   |           | ug/L | - | 85   | 56 - 127 | 2   | 23    |  |

|                            | LCSD      | LCSD      |          |
|----------------------------|-----------|-----------|----------|
| Surrogate                  | %Recovery | Qualifier | Limits   |
| <i>n-Octacosane (Surr)</i> | 113       |           | 60 - 130 |

**Lab Sample ID: MRL 570-504083/4-A**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

|         | Spike  | MRL    | MRL       |      |   |      |          |  |  |
|---------|--------|--------|-----------|------|---|------|----------|--|--|
| Analyte | Added  | Result | Qualifier | Unit | D | %Rec | Limits   |  |  |
| C10-C28 | 0.0200 | 0.0325 | ^3+       | mg/L | - | 162  | 50 - 150 |  |  |

|                            | MRL       | MRL       |          |
|----------------------------|-----------|-----------|----------|
| Surrogate                  | %Recovery | Qualifier | Limits   |
| <i>n-Octacosane (Surr)</i> | 119       |           | 60 - 130 |

**Lab Sample ID: 380-122227-B-3-A MS**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

|         | Sample | Sample    | Spike | MS     | MS        |      |   |      |          |
|---------|--------|-----------|-------|--------|-----------|------|---|------|----------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   |
| C10-C28 | <26    | ^3+       | 1650  | 1450   |           | ug/L | - | 88   | 70 - 130 |

|                            | MS        | MS        |          |
|----------------------------|-----------|-----------|----------|
| Surrogate                  | %Recovery | Qualifier | Limits   |
| <i>n-Octacosane (Surr)</i> | 112       |           | 60 - 130 |

**Lab Sample ID: 380-122227-B-3-B MSD**  
**Matrix: Water**  
**Analysis Batch: 508306**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 504083**

|         | Sample | Sample    | Spike | MSD    | MSD       |      |   |      |          |
|---------|--------|-----------|-------|--------|-----------|------|---|------|----------|
| Analyte | Result | Qualifier | Added | Result | Qualifier | Unit | D | %Rec | Limits   |
| C10-C28 | <26    | ^3+       | 1650  | 1470   |           | ug/L | - | 89   | 70 - 130 |

|                            | MSD       | MSD       |          |
|----------------------------|-----------|-----------|----------|
| Surrogate                  | %Recovery | Qualifier | Limits   |
| <i>n-Octacosane (Surr)</i> | 116       |           | 60 - 130 |

# QC Association Summary

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

## GC/MS Semi VOA

### Prep Batch: 119846

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 525.2  |            |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 525.2  |            |
| MB 380-119846/21-A   | Method Blank                  | Total/NA  | Water  | 525.2  |            |
| LCS 380-119846/23-A  | Lab Control Sample            | Total/NA  | Water  | 525.2  |            |
| LCSD 380-119846/24-A | Lab Control Sample Dup        | Total/NA  | Water  | 525.2  |            |
| MRL 380-119846/22-A  | Lab Control Sample            | Total/NA  | Water  | 525.2  |            |
| 380-122132-AD-1-A MS | Matrix Spike                  | Total/NA  | Water  | 525.2  |            |
| 380-121839-R-1-A DU  | Duplicate                     | Total/NA  | Water  | 525.2  |            |

### Analysis Batch: 120072

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 525.2  | 119846     |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 525.2  | 119846     |
| MB 380-119846/21-A   | Method Blank                  | Total/NA  | Water  | 525.2  | 119846     |
| LCS 380-119846/23-A  | Lab Control Sample            | Total/NA  | Water  | 525.2  | 119846     |
| LCSD 380-119846/24-A | Lab Control Sample Dup        | Total/NA  | Water  | 525.2  | 119846     |
| MRL 380-119846/22-A  | Lab Control Sample            | Total/NA  | Water  | 525.2  | 119846     |
| 380-122132-AD-1-A MS | Matrix Spike                  | Total/NA  | Water  | 525.2  | 119846     |
| 380-121839-R-1-A DU  | Duplicate                     | Total/NA  | Water  | 525.2  | 119846     |

### Prep Batch: 504385

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 625.1  |            |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 625.1  |            |
| MB 570-504385/1-A    | Method Blank                  | Total/NA  | Water  | 625.1  |            |
| LCS 570-504385/2-A   | Lab Control Sample            | Total/NA  | Water  | 625.1  |            |
| LCSD 570-504385/3-A  | Lab Control Sample Dup        | Total/NA  | Water  | 625.1  |            |
| 380-122227-A-3-A MS  | Matrix Spike                  | Total/NA  | Water  | 625.1  |            |
| 380-122227-A-3-B MSD | Matrix Spike Duplicate        | Total/NA  | Water  | 625.1  |            |

### Analysis Batch: 506444

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method    | Prep Batch |
|----------------------|-------------------------------|-----------|--------|-----------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 625.1 SIM | 504385     |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 625.1 SIM | 504385     |
| MB 570-504385/1-A    | Method Blank                  | Total/NA  | Water  | 625.1 SIM | 504385     |
| LCS 570-504385/2-A   | Lab Control Sample            | Total/NA  | Water  | 625.1 SIM | 504385     |
| LCSD 570-504385/3-A  | Lab Control Sample Dup        | Total/NA  | Water  | 625.1 SIM | 504385     |
| 380-122227-A-3-A MS  | Matrix Spike                  | Total/NA  | Water  | 625.1 SIM | 504385     |
| 380-122227-A-3-B MSD | Matrix Spike Duplicate        | Total/NA  | Water  | 625.1 SIM | 504385     |

### Analysis Batch: 509940

| Lab Sample ID     | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|-------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1      | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 625.1  | 504385     |
| 380-122186-3      | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 625.1  | 504385     |
| MB 570-504385/1-A | Method Blank                  | Total/NA  | Water  | 625.1  | 504385     |

## GC VOA

### Analysis Batch: 507194

| Lab Sample ID | Client Sample ID        | Prep Type | Matrix | Method       | Prep Batch |
|---------------|-------------------------|-----------|--------|--------------|------------|
| 380-122186-1  | AIEA GULCH WELLS PUMP 2 | Total/NA  | Water  | 8015B GRO LL |            |

# QC Association Summary

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

## GC VOA (Continued)

### Analysis Batch: 507194 (Continued)

| Lab Sample ID      | Client Sample ID                  | Prep Type | Matrix | Method       | Prep Batch |
|--------------------|-----------------------------------|-----------|--------|--------------|------------|
| 380-122186-2       | TB: AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 8015B GRO LL |            |
| 380-122186-3       | AIEA WELLS PUMPS 1&2 (260) P2     | Total/NA  | Water  | 8015B GRO LL |            |
| 380-122186-4       | TB: AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 8015B GRO LL |            |
| MB 570-507194/6    | Method Blank                      | Total/NA  | Water  | 8015B GRO LL |            |
| LCS 570-507194/4   | Lab Control Sample                | Total/NA  | Water  | 8015B GRO LL |            |
| LCSD 570-507194/5  | Lab Control Sample Dup            | Total/NA  | Water  | 8015B GRO LL |            |
| MRL 570-507194/3   | Lab Control Sample                | Total/NA  | Water  | 8015B GRO LL |            |
| 380-122227-C-3 MS  | Matrix Spike                      | Total/NA  | Water  | 8015B GRO LL |            |
| 380-122227-C-3 MSD | Matrix Spike Duplicate            | Total/NA  | Water  | 8015B GRO LL |            |

## GC Semi VOA

### Prep Batch: 504083

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 3510C  |            |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 3510C  |            |
| MB 570-504083/1-A    | Method Blank                  | Total/NA  | Water  | 3510C  |            |
| LCS 570-504083/2-A   | Lab Control Sample            | Total/NA  | Water  | 3510C  |            |
| LCSD 570-504083/3-A  | Lab Control Sample Dup        | Total/NA  | Water  | 3510C  |            |
| MRL 570-504083/4-A   | Lab Control Sample            | Total/NA  | Water  | 3510C  |            |
| 380-122227-B-3-A MS  | Matrix Spike                  | Total/NA  | Water  | 3510C  |            |
| 380-122227-B-3-B MSD | Matrix Spike Duplicate        | Total/NA  | Water  | 3510C  |            |

### Analysis Batch: 508306

| Lab Sample ID        | Client Sample ID              | Prep Type | Matrix | Method | Prep Batch |
|----------------------|-------------------------------|-----------|--------|--------|------------|
| 380-122186-1         | AIEA GULCH WELLS PUMP 2       | Total/NA  | Water  | 8015B  | 504083     |
| 380-122186-3         | AIEA WELLS PUMPS 1&2 (260) P2 | Total/NA  | Water  | 8015B  | 504083     |
| MB 570-504083/1-A    | Method Blank                  | Total/NA  | Water  | 8015B  | 504083     |
| LCS 570-504083/2-A   | Lab Control Sample            | Total/NA  | Water  | 8015B  | 504083     |
| LCSD 570-504083/3-A  | Lab Control Sample Dup        | Total/NA  | Water  | 8015B  | 504083     |
| MRL 570-504083/4-A   | Lab Control Sample            | Total/NA  | Water  | 8015B  | 504083     |
| 380-122227-B-3-A MS  | Matrix Spike                  | Total/NA  | Water  | 8015B  | 504083     |
| 380-122227-B-3-B MSD | Matrix Spike Duplicate        | Total/NA  | Water  | 8015B  | 504083     |

# Lab Chronicle

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-1**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab       | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|-----------|----------------------|
| Total/NA  | Prep       | 525.2        |     |                 | 119846       | KRD3          | EA POM    | 11/20/24 08:01       |
| Total/NA  | Analysis   | 525.2        |     | 1               | 120072       | Q8LA          | EA POM    | 11/21/24 16:01       |
| Total/NA  | Prep       | 625.1        |     |                 | 504385       | UD4J          | EET CAL 4 | 11/18/24 09:17       |
| Total/NA  | Analysis   | 625.1        |     | 1               | 509940       | J7WE          | EET CAL 4 | 12/04/24 18:27       |
| Total/NA  | Prep       | 625.1        |     |                 | 504385       | UD4J          | EET CAL 4 | 11/18/24 09:17       |
| Total/NA  | Analysis   | 625.1 SIM    |     | 1               | 506444       | AX7Z          | EET CAL 4 | 11/22/24 21:20       |
| Total/NA  | Analysis   | 8015B GRO LL |     | 1               | 507194       | A9VE          | EET CAL 4 | 11/25/24 15:08       |
| Total/NA  | Prep       | 3510C        |     |                 | 504083       | H6FE          | EET CAL 4 | 11/16/24 11:42       |
| Total/NA  | Analysis   | 8015B        |     | 1               | 508306       | E5RH          | EET CAL 4 | 11/27/24 17:49       |

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 2**

**Lab Sample ID: 380-122186-2**

Date Collected: 11/12/24 10:14

Matrix: Water

Date Received: 11/14/24 10:12

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab       | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|-----------|----------------------|
| Total/NA  | Analysis   | 8015B GRO LL |     | 1               | 507194       | A9VE          | EET CAL 4 | 11/25/24 17:18       |

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-3**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab       | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|-----------|----------------------|
| Total/NA  | Prep       | 525.2        |     |                 | 119846       | KRD3          | EA POM    | 11/20/24 08:01       |
| Total/NA  | Analysis   | 525.2        |     | 1               | 120072       | Q8LA          | EA POM    | 11/21/24 16:21       |
| Total/NA  | Prep       | 625.1        |     |                 | 504385       | UD4J          | EET CAL 4 | 11/18/24 09:17       |
| Total/NA  | Analysis   | 625.1        |     | 1               | 509940       | J7WE          | EET CAL 4 | 12/04/24 18:51       |
| Total/NA  | Prep       | 625.1        |     |                 | 504385       | UD4J          | EET CAL 4 | 11/18/24 09:17       |
| Total/NA  | Analysis   | 625.1 SIM    |     | 1               | 506444       | AX7Z          | EET CAL 4 | 11/22/24 21:42       |
| Total/NA  | Analysis   | 8015B GRO LL |     | 1               | 507194       | A9VE          | EET CAL 4 | 11/25/24 15:34       |
| Total/NA  | Prep       | 3510C        |     |                 | 504083       | H6FE          | EET CAL 4 | 11/16/24 11:42       |
| Total/NA  | Analysis   | 8015B        |     | 1               | 508306       | E5RH          | EET CAL 4 | 11/27/24 18:11       |

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260) P2**

**Lab Sample ID: 380-122186-4**

Date Collected: 11/12/24 10:40

Matrix: Water

Date Received: 11/14/24 10:12

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Batch Analyst | Lab       | Prepared or Analyzed |
|-----------|------------|--------------|-----|-----------------|--------------|---------------|-----------|----------------------|
| Total/NA  | Analysis   | 8015B GRO LL |     | 1               | 507194       | A9VE          | EET CAL 4 | 11/25/24 17:44       |

**Laboratory References:**

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100  
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Accreditation/Certification Summary

Client: City & County of Honolulu  
 Project/Site: RED-HILL

Job ID: 380-122186-1  
 SDG: Weekly

## Laboratory: Eurofins Eaton Analytical Pomona

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

| Authority | Program | Identification Number | Expiration Date |
|-----------|---------|-----------------------|-----------------|
| Hawaii    | State   | CA00006               | 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                          |
|-----------------|-------------|--------|----------------------------------|
| 525.2           | 525.2       | Water  | 1-Methylnaphthalene              |
| 525.2           | 525.2       | Water  | 2,4'-DDD                         |
| 525.2           | 525.2       | Water  | 2,4'-DDE                         |
| 525.2           | 525.2       | Water  | 2,4'-DDT                         |
| 525.2           | 525.2       | Water  | 2,4-Dinitrotoluene               |
| 525.2           | 525.2       | Water  | 2,6-Dinitrotoluene               |
| 525.2           | 525.2       | Water  | 2-Methylnaphthalene              |
| 525.2           | 525.2       | Water  | 4,4'-DDD                         |
| 525.2           | 525.2       | Water  | 4,4'-DDE                         |
| 525.2           | 525.2       | Water  | 4,4' DDT                         |
| 525.2           | 525.2       | Water  | Acetochlor                       |
| 525.2           | 525.2       | Water  | alpha-BHC                        |
| 525.2           | 525.2       | Water  | alpha-Chlordane                  |
| 525.2           | 525.2       | Water  | beta-BHC                         |
| 525.2           | 525.2       | Water  | Chlorobenzilate                  |
| 525.2           | 525.2       | Water  | Chloroneb                        |
| 525.2           | 525.2       | Water  | Chlorothalonil (Draconil, Bravo) |
| 525.2           | 525.2       | Water  | Chlorpyrifos                     |
| 525.2           | 525.2       | Water  | delta-BHC                        |
| 525.2           | 525.2       | Water  | Diclorvos (DDVP)                 |
| 525.2           | 525.2       | Water  | Endosulfan I (Alpha)             |
| 525.2           | 525.2       | Water  | Endosulfan II (Beta)             |
| 525.2           | 525.2       | Water  | Endosulfan sulfate               |
| 525.2           | 525.2       | Water  | Endrin aldehyde                  |
| 525.2           | 525.2       | Water  | EPTC                             |
| 525.2           | 525.2       | Water  | gamma-Chlordane                  |
| 525.2           | 525.2       | Water  | Isophorone                       |
| 525.2           | 525.2       | Water  | Malathion                        |
| 525.2           | 525.2       | Water  | Parathion                        |
| 525.2           | 525.2       | Water  | Pendimethalin (Penoxaline)       |
| 525.2           | 525.2       | Water  | Terbacil                         |
| 525.2           | 525.2       | Water  | Terbutylazine                    |
| 525.2           | 525.2       | Water  | Total Permethrin (mixed isomers) |
| 525.2           | 525.2       | Water  | trans-Nonachlor                  |

## Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority    | Program                                 | Identification Number | Expiration Date |
|--------------|---|-----------------------|-----------------|
| Arizona      | State                                   | AZ0830                | 11-16-25        |
| Arkansas DEQ | State                                   | 88-0161               | 07-02-25        |
| California   | Los Angeles County Sanitation Districts | 9257304               | 07-31-26        |
| California   | State                                   | 3082                  | 07-31-26        |
| Kansas       | NELAP                                   | E-10420               | 07-31-25        |
| Nevada       | State                                   | CA00111               | 07-31-25        |

# Accreditation/Certification Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

## Laboratory: Eurofins Calscience (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

| Authority  | Program             | Identification Number | Expiration Date |
|------------|---------------------|-----------------------|-----------------|
| Oregon     | NELAP               | 4175                  | 02-02-25        |
| USDA       | US Federal Programs | P330-22-00059         | 06-08-26        |
| Washington | State               | C916-18               | 10-11-25        |

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# Method Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

| Method       | Method Description                           | Protocol  | Laboratory |
|--------------|--|-----------|------------|
| 525.2        | Semivolatile Organic Compounds (GC/MS)       | EPA       | EA POM     |
| 625.1        | Semivolatile Organic Compounds (GC/MS)       | EPA       | EET CAL 4  |
| 625.1 SIM    | Semivolatile Organic Compounds GC/MS (SIM)   | EPA       | EET CAL 4  |
| 8015B GRO LL | Gasoline Range Organics - (GC)               | SW846     | EET CAL 4  |
| 8015B        | Diesel Range Organics (DRO) (GC) Low Level   | SW846     | EET CAL 4  |
| 3510C        | Liquid-Liquid Extraction (Separatory Funnel) | SW846     | EET CAL 4  |
| 5030C        | Purge and Trap                               | SW846     | EET CAL 4  |
| 525.2        | Extraction of Semivolatile Compounds         | EPA       | EA POM     |
| 625.1        | Liquid-Liquid Extraction                     | 40CFR136A | EET CAL 4  |

#### Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

#### Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

# Sample Summary

Client: City & County of Honolulu  
Project/Site: RED-HILL

Job ID: 380-122186-1  
SDG: Weekly

| Lab Sample ID | Client Sample ID                  | Matrix | Collected      | Received       |
|---------------|-----------------------------------|--------|----------------|----------------|
| 380-122186-1  | AIEA GULCH WELLS PUMP 2           | Water  | 11/12/24 10:14 | 11/14/24 10:12 |
| 380-122186-2  | TB: AIEA GULCH WELLS PUMP 2       | Water  | 11/12/24 10:14 | 11/14/24 10:12 |
| 380-122186-3  | AIEA WELLS PUMPS 1&2 (260) P2     | Water  | 11/12/24 10:40 | 11/14/24 10:12 |
| 380-122186-4  | TB: AIEA WELLS PUMPS 1&2 (260) P2 | Water  | 11/12/24 10:40 | 11/14/24 10:12 |

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| Client Information  |             | Sampler:   | Lab Pkt:  | Carrier Tracking No(s):                             | COC No:                           |                            |   |    |   |    |   |   |                            |
|---|-------------|--|---|---|-----------------------------------|----------------------------|---|----|---|----|---|---|----------------------------|
| Client Contact:<br>Dr. Ron Fenstemacher                               |             | bailey   | Arada Rachelle  |   | 380-28005-2757 1                  |                            |   |    |   |    |   |   |                            |
| Company:<br>City & County of Honolulu                                 |             | Phone:<br>+1 808 748 5840  | E-Mail:<br>Rachelle.Arada@et.eurofins.com   | State of Origin:                                    | Page: Page 1 of 1                 |                            |   |    |   |    |   |   |                            |
| Address:<br>630 South Beretania Street Chemistry Lab<br>Honolulu      |             | Due Date Requested:  | Analysis Requested  |   |                                   |                            |   |    |   |    |   |   |                            |
| State, Zip:<br>HI, 96843  |             | TAT Requested (days):  | Preservation Codes<br>R - NaThioSO4<br>Q - Na2SO3<br>CA - Na2SO3/HCl<br>Y - Trizma<br>I - NH4 Acetate |   |                                   |                            |   |    |   |    |   |   |                            |
| Phone:<br>808-748-5091(Tel)   |             | Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No | Other:<br>380-122186 COC  |   |                                   |                            |   |    |   |    |   |   |                            |
| Email:<br>RFENSTEMACHER@hbws.org                                      |             | PO #:<br>C20525101 exp 05312023  | QR Code   |   |                                   |                            |   |    |   |    |   |   |                            |
| Project Name:<br>RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill |             | WO #:  | Total Number of Containers  |   |                                   |                            |   |    |   |    |   |   |                            |
| Site:<br>Hawaii   |             | Project #:<br>38001111   | Special Instructions/Note:  |   |                                   |                            |   |    |   |    |   |   |                            |
|   |             | SSOW#:   |   |   |                                   |                            |   |    |   |    |   |   |                            |
| Sample Identification   | Sample Date | Sample Time  | Sample Type (C=Comp, G=grab)  | Matrix (W=water, S=solid, O=soil, BT=tissue, A=air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | R | RA | Q | OA | Y | I | Special Instructions/Note: |
| Aiea Gulch Wells Pump 2   | 12-Nov-2024 | 1014   | G   | Water   |                                   |                            | 2 | 3  | 2 | 2  |   |   |                            |
| Aiea Gulch Wells Pump 2 (Matrix Spike)                                |             |  |   | Water   |                                   |                            |   |    |   |    |   |   |                            |
| Aiea Gulch Wells Pump 2 (Matrix Spike Duplicate)                      |             |  |   | Water   |                                   |                            |   |    |   |    |   |   |                            |
| TB: Aiea Gulch Wells Pump 2   | 12-Nov-2024 | 1014   |   | Water   |                                   |                            | 2 |    |   |    |   |   |                            |
| Aiea Wells Pumps 1&2 (260) PZ   | 12-Nov-2024 | 1040   | G   | Water   |                                   |                            | 2 | 3  | 2 | 2  |   |   |                            |
| Aiea Wells Pumps 1&2 (260) (Matrix Spike)                             |             |  |   | Water   |                                   |                            |   |    |   |    |   |   |                            |
| Aiea Wells Pumps 1&2 (Matrix Spike Duplicate)                         |             |  |   | Water   |                                   |                            |   |    |   |    |   |   |                            |
| TB: Aiea Wells Pumps 1&2 (260)  | 12-Nov-2024 | 1040   |   | Water   |                                   |                            | 2 |    |   |    |   |   |                            |

  

|  |                                    |   |   |
|--|------------------------------------|---|---|
| Possible Hazard Identification   |                                    | Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) |   |
| <input type="checkbox"/> Non-Hazard  | <input type="checkbox"/> Flammable | <input type="checkbox"/> Skin Irritant  | <input type="checkbox"/> Poison B                 |
| <input type="checkbox"/> Deliverable Requested I, II, III, IV, Other (specify) | <input type="checkbox"/> Unknown   | <input type="checkbox"/> Radiological   | <input type="checkbox"/> Archive For _____ Months |
| Empty Kit Relinquished by _____  |                                    | Special Instructions/QC Requirements: ① 7799 3329 8995                              |   |
| Date/Time: 18 November 2024 1400   | Date/Time: 11/14/24                | Method of Shipment: FEDEX 3329 9009   |   |
| Company: HBWS  | Company: HBWS                      | Company: HBWS   |   |
| Date/Time: _____   | Date/Time: _____                   | Company: _____  |   |
| Date/Time: _____   | Date/Time: _____                   | Company: _____  |   |
| Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No | Custody Seal No. _____             |   |   |



## Chain of Custody Record



|  |          |   |   |  |           |  |
|--|----------|---|---|--|-----------|--|
| <b>Client Information (Sub Contract Lab)</b><br>Client Contact: N/A<br>Shipping/Receiving: N/A<br>Company: Eurofins Environment Testing Southwest<br>Address: 2841 Dew Avenue, Suite 100, Tustin, CA, 92780<br>Phone: 714-895-5494 (Tel)<br>Email: N/A<br>Project #: 38001111<br>SSO#: N/A<br>Site: Honolulu BWS Sites |          | Lab Pkt: Arada, Rachelle<br>E-Mail: Rachelle.Arada@et-eurofins.com<br>State: Hawaii   |   | Carrier Tracking No(s): N/A<br>State of Origin: Hawaii<br>Job #: 380-122186-1<br>Preservation Codes: |           |  |
| Due Date Requested: 12/2/2024<br>TAT Requested (days): N/A   |          | Analysis Requested:   |   |  |           |  |
| PO #: N/A<br>WO #: N/A<br>Project #: 38001111<br>SSO#: N/A   |          | Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/><br>Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/><br>0218_DRO_LL_CS/3510C_LL_HNL Ranges: C10-<br>80158_GRO_LL/5030C (MOD) GRO<br>625_1_SIM/625_Prep (MOD) Extended PAH: Lbl<br>625_1/625_Prep (MOD) Tentatively Identified Compounds (Hold) |   |  |           |  |
| <b>Sample Identification - Client ID (Lab ID)</b>  |          | Total Number of Containers: 7   |   |  |           |  |
| AIEA GULCH WELLS PUMP 2 (380-122186-1)   | 11/12/24 | 10:14 Hawaiian  | G | Water  | X X X X X | MRLs are needed. Confirm any hits >RL. |
| TB: AIEA GULCH WELLS PUMP 2 (380-122186-2)   | 11/12/24 | 10:14 Hawaiian  | G | Water  | X         | MRLs are needed.                       |
| AIEA WELLS PUMPS 1&2 (260) P2 (380-122186-3)   | 11/12/24 | 10:40 Hawaiian  | G | Water  | X X X X   | MRLs are needed. Confirm any hits >RL. |
| TB: AIEA WELLS PUMPS 1&2 (260) P2 (380-122186-4)   | 11/12/24 | 10:40 Hawaiian  | G | Water  | X         | MRLs are needed.                       |

380-122186 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

**Possible Hazard Identification**  
 Unconfirmed  Return To Client  Disposal By Lab  Archive For  Months

Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2

|                            |               |                     |
|----------------------------|---------------|---------------------|
| Empty Kit Relinquished by: | Date:         | Method of Shipment: |
| Relinquished by: <i>Xm</i> | 11/15/24 6110 | Company: <i>CEA</i> |
| Relinquished by:           | Date:         | Company:            |
| Relinquished by:           | Date:         | Company:            |

Custody Seals Intact:  Yes  No  
 Cooler Temperature(s) °C and Other Remarks: 05/15 SELF



## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-122186-1

SDG Number: Weekly

**Login Number: 122186**

**List Number: 1**

**Creator: Do, Michelle**

**List Source: Eurofins Eaton Analytical Pomona**

| Question   | Answer | Comment |
|--|--------|---------|
| The coolers custody seal, if present, is intact.                                 | True   |         |
| Sample custody seals, if present, are intact.                                    | True   |         |
| Samples were received on ice.  | True   |         |
| Cooler(s) Temperature is acceptable.   | True   |         |
| Cooler(s) Temperature is recorded.   | True   |         |
| COC is present.  | True   |         |
| COC is filled out in ink and is legible.   | True   |         |
| COC is filled out with all pertinent information.                                | True   |         |
| There are no discrepancies between the containers received and the COC.          | True   |         |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |         |
| Sample containers have legible labels.   | True   |         |
| Containers are not broken or leaking.  | True   |         |
| Sample collection date/times are provided.                                       | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |         |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | True   |         |
| CIO4 headspace requirement met (>50% for CA, >30% for other states).             | True   |         |
| Samples do not require splitting or compositing.                                 | True   |         |
| Container provided by EEA  | True   |         |



## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-122186-1

SDG Number: Weekly

**Login Number: 122186**

**List Number: 2**

**Creator: Khana, Piyush**

**List Source: Eurofins Calscience**

**List Creation: 11/15/24 02:59 PM**

| Question   | Answer | Comment                            |
|--|--------|------------------------------------|
| Radioactivity wasn't checked or is <=/ background as measured by a survey meter. | N/A    |                                    |
| The cooler's custody seal, if present, is intact.                                | N/A    |                                    |
| Sample custody seals, if present, are 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 is acceptable.  | True   |                                    |
| Cooler Temperature is recorded.  | True   | 1.5                                |
| COC is present.  | True   |                                    |
| COC is filled out in ink and legible.  | True   |                                    |
| COC is filled out with all pertinent information.                                | True   |                                    |
| Is the Field Sampler's name present on COC?                                      | N/A    | Received project as a subcontract. |
| There are no discrepancies between the containers received and the COC.          | True   |                                    |
| Samples are received within Holding Time (excluding tests with immediate HTs)    | True   |                                    |
| 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   |                                    |
| Sample Preservation Verified.  | True   |                                    |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True   |                                    |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").  | True   |                                    |
| Multiphasic samples are not present.   | True   |                                    |
| Samples do not require splitting or compositing.                                 | True   |                                    |
| Residual Chlorine Checked.   | N/A    |                                    |