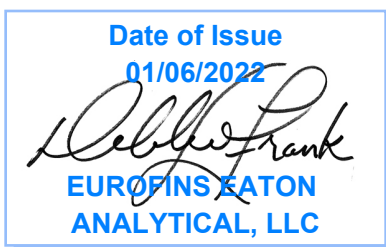


750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg." Room 308  
Honolulu, HI 96843  
Attention: Erwin Kawata  
Fax: 808-550-5018



Utah ELCP CA00006

DEB: Debbie L Frank  
Project Manager

Report: 975524  
Project: RED-HILL  
Group: Red-Hill Expanded List (Albuquerque+)

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

| State            | Certification Number | State                                      | Certification Number |
|------------------|----------------------|--|----------------------|
| Alabama          | 41060                | Montana                                    | Cert 0035            |
| Arizona          | AZ0778               | Nebraska                                   | NE-OS-21-13          |
| Arkansas         | CA00006              | Nevada                                     | CA00006              |
| California       | 2813                 | New Hampshire *                            | 2959                 |
| Colorado         | CA00006              | New Jersey *                               | CA 008               |
| Connecticut      | PH-0107              | New Mexico                                 | CA00006              |
| Delaware         | CA 006               | New York *                                 | 11320                |
| Florida *        | E871024              | North Carolina                             | 06701                |
| Georgia          | 947                  | North Dakota                               | R-009                |
| Guam             | 21-008R              | Ohio - 537.1                               | 87786                |
| Hawaii           | CA00006              | Oregon *                                   | 4034                 |
| Idaho            | CA00006              | Pennsylvania *                             | 68-00565             |
| Illinois         | 200033               | Puerto Rico                                | CA00006              |
| Indiana          | C-CA-01              | Rhode Island                               | LAO00326             |
| Iowa – Asbestos  | 413                  | South Carolina                             | 87016                |
| Kansas *         | E-10268              | South Dakota                               | CA11320              |
| Kentucky         | 90107                | Tennessee                                  | TN02839              |
| Louisiana *      | LA008                | Texas *                                    | T104704230-20-18     |
| Maine            | CA00006              | Utah (Primary AB) *                        | CA00006              |
| Maryland         | 224                  | Vermont                                    | VT0114               |
| Marianas Islands | MP0004               | Virginia *                                 | 460260               |
| Massachusetts    | M-CA006              | Washington                                 | C838                 |
| Michigan         | 9906                 | EPA Region 5                               | CA00006              |
| Mississippi      | CA00006              | Los Angeles County<br>Sanitation Districts | 10264                |

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

The test listed below are accredited and met the requirements of ISO/IEC 17025 as verify by A2LA.

Refer to our certificates and scope of accreditations (no. 5890-1 and 5890-2) found at:

<https://www.eurofinsus.com/Eaton>

| Test(s)   | Method(s)                                  | Potable Water * | Waste Water | Test(s)                                  | Method(s)                              | Potable Water * | Waste Water |
|---|--|-----------------|-------------|--|--|-----------------|-------------|
| Enterococci   | Enterolert                                 | x               | x           | Gross Alpha coprecipitation              | SM 7110 C                              | x               | x           |
| Escherichia coli (Enumeration)  | SM 9221 B.1<br>SM 9221 F                   | x               |             | Hardness                                 | SM 2340 B                              | x               | x           |
| Fecal Coliform (P/A and Enumeration)  | SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)     | x               | x           | Hexavalent Chromium                      | EPA 218.6,                             | x               | x           |
| Fecal Streptococci and Enterococci  | SM 9230 B                                  | x               | x           | Hexavalent Chromium                      | EPA 218.7,                             | x               |             |
| Heterotrophic Bacteria  | SM 9215 B                                  | x               |             | Hexavalent Chromium                      | SM 3500-Cr B                           |                 | x           |
| Legionella  | Legiolert®                                 | x               |             | Inorganic Anions and DBPs                | EPA 300.0                              | x               | x           |
| Pseudomonas aeruginosa  | Idexx Pseudalart                           | x               |             | Norganic Anions and DBPs                 | EPA 300.1                              | x               |             |
| Total Coliform (P/A and Enumeration)  | SM 9221A, SM 9221B, SM 9221 C              | x               | x           | Kjeldahl Nitrogen                        | EPA 351.2                              |                 | x           |
| Total Coliform, Total Coliform with Chlorine Present                                      | SM 9221 B                                  | x               | x           | Metals                                   | EPA 200.7,<br>EPA200.8                 | x               | x           |
| Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure) | SM 9223                                    | x               |             | Nitrosamines                             | EEA-Agilent 521.1 (GCMS-24250)         | x               |             |
| Total Microcystins and Nodularins   | EPA 546                                    | X               |             | Nitrate/Nitrite Nitrogen                 | EPA 353.2                              | x               | x           |
| Yeast and Mold  | SM 9610                                    | x               |             | Odor                                     | SM2150B                                | x               |             |
| 1,2,3-Trichloropropane (TCP) at 5 PPT   | CA SRL 524M-TCP                            | x               |             | Organohalide Pesticides and PCB          | EPA 505                                | x               |             |
| 1,4-Dioxane   | EPA 522                                    | x               |             | Ortho Phosphate                          | SM 4500P E                             | x               |             |
| 2,3,7,8-TCDD  | Modified EPA 1613 B                        | x               |             | Oxyhalides Disinfection Byproducts       | EPA 317.0                              | x               |             |
| Acrylamide  | + LCMS 2440)                               | x               |             | Perchlorate                              | EPA 331.0                              | x               |             |
| Algal Toxins/Microcystin  | + LCMS 3570                                | x               |             | Perchlorate (Low and High Levels)        | EPA 314.0                              | x               |             |
| Alkalinity  | SM 2320B                                   | x               | x           | Perfluorinated Alkyl Acids               | EPA 533, EPA 537, EPA 537.1            | x               |             |
| Ammonia   | EPA 350.1, SM 4500-NH3 H                   |                 | x           | PPCP and EDC                             | + LCMS-2443                            | x               |             |
| Asbestos  | EPA 100.2                                  | x               | x           | pH                                       | EPA 150.1<br>SM 4500-H+ B              | x               | x           |
| Bicarbonate Alkalinity as HCO3  | SM 2330 B                                  | x               | x           | Phenolics – Low Level                    | +WC 2493 (EPA 420.2 and EPA 420.4 MOD) | x               | x           |
| BOD/CBOD  | SM 5210 B                                  |                 | x           | Phenylurea Pesticides/Herbicides         | + LCMS-2448                            | x               |             |
| Bromate   | + LCMS- 2447                               | x               |             | Radium-226, Radium-228                   | GA Tech (Rad-2374)                     | x               |             |
| Carbonate as CO3  | SM 2330 B                                  | x               | x           | Radon-222                                | SM 7500RN                              | x               |             |
| Carbonyls   | EPA 556                                    | x               | x           | Residue (Filterable)                     | SM 2540C                               | x               | x           |
| Chemical Oxygen Demand  | EPA 410.4, SM 5220D                        |                 | x           | Residue (Non-Filterable)                 | SM 2540D                               |                 | x           |
| Chlorinated Acids   | EPA 515.4                                  | x               |             | Residue (Total)                          | SM 2540B                               |                 | x           |
| Chlorine Dioxide  | Palin Test Chlordio X Plus, SM 4500-CLO2 D | x               |             | Residue (Volatile)                       | EPA 160.4                              |                 | x           |
| Chlorine, Free, Combined, Total Residual, Chloramines                                     | SM 4500-Cl G                               | x               |             | Semi-Volatile Compounds                  | EPA 525.2                              | x               |             |
| Color   | SM2120B                                    | x               |             | Silica                                   | SM 4500-SiO2 C                         | x               | x           |
| Conductivity  | EPA 120.1, SM 2510B                        | x               | x           | Sulfide                                  | SM 4500-S D                            |                 | x           |
| Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated               | SM 2330 B                                  | x               |             | Sulfite                                  | SM 4500-SO3 B                          | x               | x           |
| Cyanide (Amenable)  | SM 4500-CN G                               | x               | x           | Surfactants                              | SM 5540C                               | x               | x           |
| Cyanide (Free)  | SM 4500CN F                                | x               | x           | Taste and Odor                           | SM 6040 E                              | x               |             |
| Cyanide (Total)   | EPA 335.4                                  | x               | x           | Total Organic Carbon                     | SM 5310 C                              | x               | x           |
| Cyanogen Chloride (Screen)  | + 335 Mod (WC-24467)                       | x               |             | Total Phenols                            | EPA 420.1                              |                 | x           |
| Diquat and Paraquat   | EPA 549.2                                  | x               |             | Total Phenols                            | EPA 420.4                              | x               | x           |
| DBP and HAA   | SM 6251 B                                  | x               |             | Triazine Pesticides and their Degradates | + LCMS-3617                            | x               |             |
| Dissolved Organic Carbon  | SM 5310 C                                  | x               |             | Turbidity                                | EPA 180.1                              | x               | x           |
| Dissolved Oxygen  | SM 4500-O G                                |                 | x           | Uranium by ICP/MS                        | EPA 200.8                              | x               |             |
| EDB/DCBP/TCP  | EPA 504.1                                  | x               |             | UV 254 Organic Constituents              | SM 5910B                               | x               |             |
| EDB/DBCP and Disinfection Byproducts  | EPA 551.1                                  | x               |             | VOCs                                     | EPA 524.2                              | x               |             |
| EDTA and NTA  | + WC-2454                                  | x               |             | VOCs                                     | + (GCMS 2412) by EPA 524.2 modified    | x               |             |
| Endothall   | EPA 548.1, +(LCMS-2445)                    | x               |             |  |  |                 |             |
| Fluoride  | SM 4500F C                                 | x               | x           |  |  |                 |             |
| Glyphosate  | EPA 547                                    | x               |             |  |  |                 |             |
| Glyphosate and AMPA   | + LCMS-3618                                | x               |             |  |  |                 |             |
| Gross Alpha and Gross Beta  | EPA 900.0                                  | x               | x           |  |  |                 |             |

(\* ) includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage.

(+ ) In-House Method

**Acknowledgement of Samples Received**

Addr: **Honolulu Board of Water Supply**  
 630 South Beretania Street  
 Public Service Bldg." Room 308  
 Honolulu, HI 96843

Attn: Erwin Kawata  
 Phone: 808-748-5091

Client ID: HONOLULU  
 Folder #: 975524  
 Project: RED-HILL  
 Sample Group: Red-Hill Expanded List  
 (Albuquerque+)  
 Project Manager: Debbie L Frank  
 Phone: (626) 386-1149  
 PO #: C20525101 exp 05312023

The following samples were received from you on **December 16, 2021 at 1409**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

| Sample #     | Sample ID   | Sample Date      |
|--------------|---|------------------|
| 202112160536 | Aiea Well P2  | 12/15/2021 0958  |
|              | Static ID: HI0000331-004  |                  |
|              | @625A_Physis C @625BN_Physis C @625PAH_Physis_TICS_C                            |                  |
|              | @8015 Ethanol_Subbed @VOASDWA C plus plus TICs C (SUB)Gas Fraction Hydrocarbons |                  |
|              | Miscellaneous Charges TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5         |                  |
|              | TPH 8015 Jef Fuel 8   |                  |
| 202112160537 | TRAVEL BLANK  | 12/15/2021 0958  |
|              | @VOASDWA C plus plus TICs TBC (SUB)Gas Fraction Hydrocarbons                    |                  |
| 202112160538 | Halawa Well P2  | 12/15/2021 1117  |
|              | Static ID: HI0000331-024  |                  |
|              | @625A_Physis C @625BN_Physis C @625PAH_Physis_TICS_C                            |                  |
|              | @8015 Ethanol_Subbed @VOASDWA C plus plus TICs C (SUB)Gas Fraction Hydrocarbons |                  |
|              | Miscellaneous Charges TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5         |                  |
|              | TPH 8015 Jef Fuel 8   |                  |
| 202112160539 | TRAVEL BLANK  | 12/15/2021 1117  |
|              | @VOASDWA C plus plus TICs TBC (SUB)Gas Fraction Hydrocarbons                    |                  |
| 202112170206 | RUSH  | 12/15/2021 11:17 |
|              | RUSH  |                  |

**Test Description**

- @625A\_Physis C -- 625 Acid Extractable in ug/L
- @625BN\_Physis C -- 625 Base Neutral Extractable in ug/L
- @625PAH\_Physis\_TICS\_C -- 625PAH in ug/L
- @8015 Ethanol\_Subbed -- Ethanol
- @VOASDWA C plus plus TICs C -- Volatile Organics by GCMS
- @VOASDWA C plus plus TICs TBC -- Volatile Organics by GCMS



Eaton Analytical

# CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY

750 Royal Oaks Drive, Suite 100  
 Monrovia, CA 91016-3629  
 Phone: 626 386 1100  
 Fax: 626 386 1101  
 800 566 LABS (800 566 5227)

LOGIN COMMENTS: \_\_\_\_\_

SAMPLES CHECKED AGAINST COC BY: JS

SAMPLES LOGGED IN BY: \_\_\_\_\_

SAMPLES REC'D DAY OF COLLECTION?  (check for yes)

SAMPLE TEMP RECEIVED AT:

Colton / No. California / Arizona \_\_\_\_\_ °C ( Compliance: 4 ± 2 °C )

Monrovia \_\_\_\_\_ °C ( Compliance: 4 ± 2 °C )

CONDITION OF BLUE ICE: Frozen \_\_\_\_\_ Thawed \_\_\_\_\_ Wet Ice \_\_\_\_\_ No Ice \_\_\_\_\_

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

TO BE COMPLETED BY SAMPLER:

COMPLIANCE SAMPLES  NON-COMPLIANCE SAMPLES  (check for yes)

COMPLIANCE SAMPLES - Requires state forms

REGULATION INVOLVED: \_\_\_\_\_

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,....)

SEE ATTACHED BOTTLE ORDER FOR ANALYSES  (check for yes). OR

list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

PROJECT CODE: RED HILL

SAMPLE GROUP: 4Q2021

STD \_\_\_ 1 wk \_\_\_ X \_\_\_ 3 day \_\_\_ 2 day \_\_\_ 1 day \_\_\_

CLIENT LAB ID

MATRIX

FIELD DATA

FIELD DATA

SAMPLE DATE

SAMPLE TIME

12/15/21

0958

Aiea Well P2

12/15/21

1117

Halawa Well P2

| SAMPLED BY:      | SIGNATURE | PRINT NAME  | COMPANY/TITLE | DATE     | TIME |
|------------------|-----------|-------------|---------------|----------|------|
| RELINQUISHED BY: |           | E Juagdan   | BWS HONOLULU  | 12/15/21 | 1330 |
| RECEIVED BY:     |           | Joe Sanchez | BWS HONOLULU  | 12/16/21 | 1409 |
| RELINQUISHED BY: |           |             |               |          |      |
| RECEIVED BY:     |           |             |               |          |      |

\* MATRIX TYPES: RSW = Raw Surface Water  
 RGW = Raw Ground Water  
 CFW = Chlor(am)inated Finished Water  
 FW = Other Finished Water  
 SEAW = Sea Water  
 WW = Waste Water  
 BW = Bottled Water  
 SW = Storm Water  
 SO = Soil  
 SL = Sludge  
 O = Other - Please Identify



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

975524 975207

## SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 1051A (Observation = 4.0 °C) (Corr. Factor = -0.2 °C) (Final = 3.8 °C)

TYPE OF ICE: Real  Synthetic  No Ice

CONDITION OF ICE: Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

## Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

|   |   |
|---|---|
| 1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) | 2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) |
| 3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) | 4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) |

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) VOA and Radon Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

| Samp ID | Bottle # | None/<6 mm | >6mm | Test | Samp ID | Bottle # | None/<6 mm | >6mm | Test |
|---------|----------|------------|------|------|---------|----------|------------|------|------|
| 0534    | 5        | 1          |      | 775  |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): \_\_\_\_\_

| RECEIVED BY: | SIGNATURE | PRINT NAME | COMPANY/TITLE             | DATE | TIME |
|--------------|-----------|------------|---------------------------|------|------|
|              |           |            | Eurofins Eaton Analytical |      |      |
|              |           |            | Eurofins Eaton Analytical |      |      |



Eaton Analytical

Kit Order for Honolulu Board of Water Supply

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
 Monrovia, California 91016-3629  
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 12/8/2021 12:13:09PM

Note: Sampler Please return this paper with your samples

Kit #: 307412   
 Created By: - (AutoGenerated)  
 Deliver By: 12/17/2021  
 STG: Bottle Orders  
 Ice Type:

Client ID: HONOLULU   
 Project Code: RED-HILL Bottle Orders  
 Group Name: Red-Hill Expanded List (Albuquerque+)  
 PO#/JOB#: C20525101 exp 05312023  
 Description: HALAWA WELLS UNITS-1&2-W PZ

**Ship Sample Kits to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Chemistry Lab  
 Honolulu, HI 96843  
 Attn: Ron Fenstemacher  
 Phone: 808-748-5841  
 Fax: 808-550-5572

**Send Report to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

**Billing Address**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

| # of Sample Tests | Bottle Qty - Type [ preservative information ]  | Total | UN DOT # |
|-------------------|---|-------|----------|
| 1                 | Chloride-Nitrate-as Nitrogen by IC, Nitrite-Nitrogen by IC, Sulfate                                     | 1     |          |
| 1                 | @625A_Physis C  | 1     |          |
| 1                 | @625BN_Physis C   | 1     |          |
| 1                 | @625PAH_Physis_TICS_C   | 2     |          |
| 1                 | TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C                           | 6     |          |
| 1                 | @525PLUS-G-PLUS-TGS   | 2     | UN1789   |
| 1                 | Fluoride  | 1     |          |
| 1                 | Alkalinity in CaCO3-units, PH (H3=part HT-not-compliant), Specific Conductance                          | 1     |          |
| 1                 | @VOA-TBA-C  | 3     | UN1789   |
| 1                 | Acetone by 624_Subbed-C   | 3     | UN1789   |
| 1                 | Acetone by 624_Subbed-C-TB  | 2     | UN1789   |
| 1                 | @504MOD-C   | 3     |          |
| 1                 | @505-EAL,@MLE505  | 3     |          |
| 1                 | 8015 Gas_C  | 3     |          |
| 1                 | @504MOD-TB-C  | 2     |          |
| 1                 | 8015 Gas_TB   | 2     |          |
| 1                 | @VOASDWA C plus TICs TBC  | 3     | UN1789   |
| 1                 | @VOASDWA C plus TICs C  | 3     | UN1789   |
| 1                 | @8015 Ethanol_Subbed  | 3     |          |
| 1                 | @VOA-TBA-TB-C   | 2     |          |
| 1                 | @ICPMS-Calcium_Total ICAP, Magnesium_Total ICAP, Mercury ICPMS, Potassium Total ICAP, Sodium Total ICAP | 1     | UN2031   |
| 1                 | Total-Dissolved-Solid (TDS)   | 1     |          |
| 1                 | Bromide by 300-0  | 1     |          |



Eaton Analytical

### Kit Order for Honolulu Board of Water Supply

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 12/8/2021 12:13:09PM

**Note: Sampler Please return this paper with your samples**

Kit #: 307412  

Client ID: HONOLULU

Project Code: RED-HILL Bottle Orders

Group Name: Red-Hill Expanded List (Albuquerque+)

PO#/JOB#: C20525101 exp 05312023

Description: HALAWA WELLS ~~UNITS~~ + & 2 - w - PZ

Created By: - [AutoGenerated]  
Deliver By: 12/17/2021  
STG: Bottle Orders  
Ice Type:

**Ship Sample Kits to**  
Honolulu Board of Water Supply  
630 South Beretania Street  
Chemistry Lab  
Honolulu, HI 96843

Attn: Ron Fenstemacher  
Phone: 808-748-5841  
Fax: 808-550-5572

**Send Report to**  
Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg." Room 308  
Honolulu, HI 96843

Attn: Erwin Kawata  
Phone: 808-748-5091  
Fax: 808-550-5018

**Billing Address**  
Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg." Room 308  
Honolulu, HI 96843

Attn: Erwin Kawata  
Phone: 808-748-5091  
Fax: 808-550-5018

| # of Sample Tests | Bottle Qty - Type [ preservative information ] | Total           | UN DOT # |
|-------------------|--|-----------------|----------|
| Sum Tests: 23     |  | Sum Bottles: 50 |          |

#### Comments

SITE ID: HALAWA WELLS ~~(331-206-TP066)~~ PZ 331-024

SAMPLER: FOUR 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND SIX 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.

SHIPPING: Travel Blanks - TBA/MTBE, VOASDWA - Prepare TBs in the VOA LAB. Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Container Labels)

ASM: Be sure to coordinate Follow-up as needed for any new detections in Field samples. Acetone - follow-ups need to use EPA 624

Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By





Eaton Analytical


Kit Order for Honolulu Board of Water Supply

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
 Monrovia, California 91016-3629  
 (626) 386-1100 FAX (866) 988-3757

Created Date & Time: 12/8/2021 12:13:03PM

**Note: Sampler Please return this paper with your samples**

Kit #: 307411   Client ID: HONOLULU  
 Created By: - (AutoGenerated)  
 Deliver By: 12/17/2021  
 STG: Bottle Orders  
 Ice Type:  
 Project Code: RED-HILL Bottle Orders  
 Group Name: Red-Hill Expanded List (Albuquerque+)  
 PO#/JOB#: C20525101 exp 05312023  
 Description: AIEA WELLS ~~RUMPS-1&2-2607-1~~ **P2**

**Ship Sample Kits to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Chemistry Lab  
 Honolulu, HI 96843  
 Attn: Ron Fenstermacher  
 Phone: 808-748-5841  
 Fax: 808-550-5572

**Send Report to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

**Billing Address**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

| # of Sample Tests | Bottle Qty - Type [ preservative information ]   | Total | UN DOT # |
|-------------------|--|-------|----------|
| 1                 | Chloride, Nitrate as Nitrogen by IC, Nitrite Nitrogen by IC, Sulfate                                     | 1     |          |
| 1                 | @625A_Physis C   | 1     |          |
| 1                 | @625BN_Physis C  | 1     |          |
| 1                 | @625PAH_Physis_TICS C  | 2     |          |
| 1                 | TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C                            | 6     |          |
| 1                 | @525PLUS-C-PLUS TICS   | 2     | UN1789   |
| 1                 | Fluoride   | 1     |          |
| 1                 | Alkalinity in CaCO3 units, PH (H3=past HT-not-compliant), Specific Conductance                           | 1     |          |
| 1                 | @VOA-TBA-C   | 3     | UN1789   |
| 1                 | Acetone by 624_Subbed C  | 3     | UN1789   |
| 1                 | Acetone by 624_Subbed C TB   | 2     | UN1789   |
| 1                 | @504MOD C  | 3     |          |
| 1                 | @505_EAL,@ML505  | 3     |          |
| 1                 | 8015 Gas_C   | 3     |          |
| 1                 | @504MOD TB C   | 2     |          |
| 1                 | 8015 Gas_C TB  | 2     |          |
| 1                 | @VOASDWA C plus plus TICs TBC  | 3     | UN1789   |
| 1                 | @VOASDWA C plus plus TICs C  | 3     | UN1789   |
| 1                 | @8015 Ethanol_Subbed   | 3     |          |
| 1                 | @ICPMS, Calcium Total HCAP, Magnesium Total HCAP, Mercury ICPMS, Potassium Total ICAP, Sodium Total ICAP | 1     | UN2031   |
| 1                 | Total Dissolved Solid (TDS)  | 1     |          |
| 1                 | Bromide by 309-0   | 1     |          |



Eaton Analytical

Kit Order for Honolulu Board of Water Supply

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
(626) 386-1100 FAX (866) 988-3757

Created Date & Time: 12/8/2021 12:13:03PM

Note: Sampler Please return this paper with your samples

Kit #: 307411  
Created By: - [AutoGenerated]  
Deliver By: 12/17/2021  
STG: Bottle Orders  
Ice Type:  
Client ID: HONOLULU  
Project Code: RED-HILL Bottle Orders  
Group Name: Red-Hill Expanded List (Albuquerque+)  
PO#/JOB#: C20525101 exp 05312023  
Description: AIEA WELLS PUMPS-1&2-(260)- PZ

Ship Sample Kits to  
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630 South Beretania Street  
Chemistry Lab  
Honolulu, HI 96843  
Attn: Ron Fenstermacher  
Phone: 808-748-5841  
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Send Report to  
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Phone: 808-748-5091  
Fax: 808-550-5018

# of Sample Tests      Bottle Qty - Type [ preservative information ]      Total      UN DOT #

Sum Tests: 22      Sum Bottles: 48

Comments

AIEA WELLS PUMPS-1&2-(260)-(331-203-TP-490) PZ 331-004

SAMPLER:

Four 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Six 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.

SHIPPING:

Travel Blanks - TBA/MTBE, VOASDWA - Prepare TBs in the VOA LAB.  
Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Container Labels)

ASM: Be sure to coordinate Follow-up as needed for any new detections in Field samples.  
Acetone - follow-ups need to use EPA 624

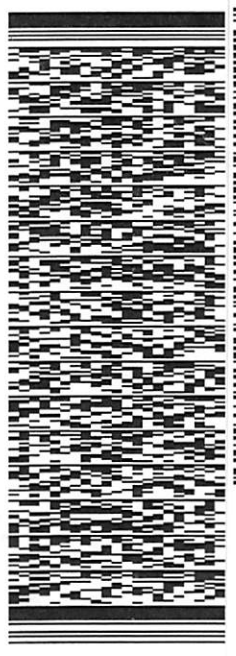
Code      Status      Date Shipped      Via      Tracking #      # of Coolers      Prepared By

ORIGIN ID:HIKA (808) 748-5840  
BMS CHEM LAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S. BERETANIA ST.  
CHEMICAL LABORATORY  
HONOLULU, HI 96843  
UNITED STATES US

SHIP DATE: 15DEC21  
ACTWGT: 50.00 LB  
CAD: 100205419/NET4400  
BILL RECIPIENT

TO C CHUCK  
EUROFINS EATON ANALYTICAL, INC  
750 ROYAL OAKS DR  
SUITE 100  
MONROVIA CA 91016  
REF: (626) 386-1178  
INV  
PO DEPT

56DJ3/E934/FE4A



TRK# 1 of 3  
#0201 7755 1029 5730  
## MASTER ##

THU - 16 DEC 11:30A  
PRIORITY OVERNIGHT

WZ WHPA

CA-US 91016  
BUR



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Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: \_\_\_\_\_

### SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 021A (Observation = 3.8 °C) (Corr. Factor = -0.2 °C) (Final = 3.6 °C)

TYPE OF ICE: Real  Synthetic  No Ice  Frozen  Partially Frozen  Thawed  N/A

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

|   |   |
|---|---|
| 1 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) | 2 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) |
| 3 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) | 4 = (Observation = _____ °C) (Corr. Factor = _____ °C) (Final = _____ °C) |

4) Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)

5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

7) Headspace:  No Samples with Headspace:  Samples with Headspace (see below):

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

| Samp ID | Bottle # | None/<6 mm | >6mm | Test | Samp ID | Bottle # | None/<6 mm | >6mm | Test |
|---------|----------|------------|------|------|---------|----------|------------|------|------|
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |
|         |          |            |      |      |         |          |            |      |      |

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors):

RECEIVED BY: \_\_\_\_\_ SIGNATURE: Joe Sanchez PRINT NAME: Joe Sanchez COMPANY/TITLE: Eurofins Eaton Analytical DATE: 12/16/11 TIME: 1414

SAMPLES CHECKED AGAINST COC BY: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_ COMPANY/TITLE: Eurofins Eaton Analytical DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

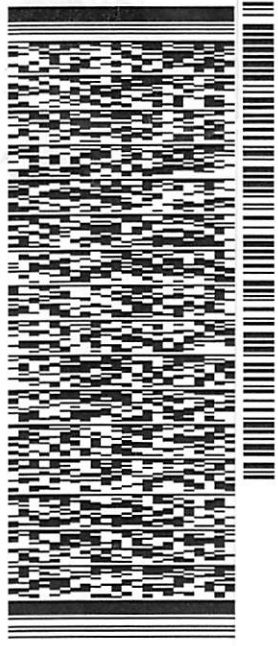
ORIGIN ID:HIKA (808) 748-5840  
BMS CHEM LAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S. BERETANIA ST.  
CHEMICAL LABORATORY  
HONOLULU, HI 96843  
UNITED STATES US

SHIP DATE: 15DEC21  
ACTWGT: 50.00 LB  
CAD: 100205419/MET/4400  
BILL RECIPIENT

TO C CHUCK

EUROFINS EATON ANALYTICAL, INC  
750 ROYAL OAKS DR  
SUITE 100  
MONROVIA CA 91016  
REF: (626) 386-1178  
INV/ PO DEPT:

56DJ3/E934/FE4A



2 of 3

MP# 7755 1029 6026  
0263  
Mstr# 7755 1029 5730

THU - 16 DEC 11:30A  
PRIORITY OVERNIGHT

0201

WZ WHPA

CA-US 91016  
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 1 800 566 LABS (1 800 566 5227)

**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843

**Folder Comments**

Results for 625 ACIDS, PAHS and BNAS are submitted by Physis Environmental in Anaheim CA  
 Results for Ethanol, TPH Diesel and Motor Oil, Jet Fuels and Gas are submitted by Emax Laboratories

ND reporting (subcontract lab reports)  
 MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported as ND, are ND at the RL.

Tentatively Identified compounds (TIC).  
 The analyte has been "tentatively identified" as present and the associated numerical value is the estimated concentration in the sample. The analytes are not positively identified or quantified. Presentation of results in this report does not indicate actual presence of the compound identified in the TIC summary. Information is for study purposes only.

@625mod (Low Level SVOCs by GCMS (PAH/BNA - Base/Neutral/Acid Extractables)  
 See subcontractor's report. Physis reports TICs in addendum report titled Total Ion Chromatogram.

@524.2 (VOC by GCMS)

|                  |       |                          |                         |
|------------------|-------|--------------------------|-------------------------|
| 202112160536     | 524.2 | TICs                     | None Detected           |
| 202112160537     | 524.2 | TICs                     |                         |
| Compound Name    |       | Estimated Retention Time | Estimated Concentration |
| Unknown compound |       | 1.306 minutes            | 4.17 ug/L               |
| Furfural         |       | 9.579 minutes            | 4.24 ug/L               |
| 202112160538     | 524.2 | TICs                     | None Detected           |
| 202112160539     | 524.2 | TICs                     |                         |
| Compound Name    |       | Estimated Retention Time | Estimated Concentration |
| Unknown compound |       | 1.306 minutes            | 4.72 ug/L               |
| Furfural         |       | 9.584 minutes            | 2.42 ug/L               |

Project change per communication with Erwin Kawata, 071718  
 Ethanol - ELLE method 1671 2000 ug/L. EMAX method 8015, RL 2000 ug/L. MRLs are the same.  
 MTBE - 524.3 0.02 ug/L (20 ng/L) is not reported, method decommissioned. See 524.2 at elevated RL of 0.5 ug/L.  
 TBA - 524.3 1 ug/L is not reported, method decommissioned. See 524.2 at elevated RL of 2 ug/L  
 ACETONE MRL elevated to 500 due to matrix artifact of preservation, project spec change Erwin Kawata. 021821

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**Laboratory Comments**

**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
(Albuquerque+)

Honolulu Board of Water Supply  
Erwin Kawata  
630 South Beretania Street  
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Honolulu, HI 96843

---

**Flags Legend:**

FB - Target analyte detected in TB > MRL but sample is ND.

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

VC - CCV is high biased, ND data are reportable as per TNI V1M4 1.7.2.e).i.

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 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg." Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Analyzed         | Analyte      | Sample ID             | Result | HI Limit | Units | MRL |
|------------------|--------------|-----------------------|--------|----------|-------|-----|
| 12/25/2021 00:00 | Benzoic acid | <u>Aiea Well P2</u>   | 1.89   |          | ug/L  | 0.2 |
| 12/25/2021 00:00 | Benzoic acid | <u>Halawa Well P2</u> | 1.64   |          | ug/L  | 0.2 |



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**Report:** 975524  
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 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method     | Analyte                        | Result                            | Units | MRL   | Dilution |
|--|----------------|------------|------------------|------------|--------------------------------|-----------------------------------|-------|-------|----------|
| <b>Aiea Well P2 (202112160536)</b>               |                |            |                  |            |                                | <b>Sampled on 12/15/2021 0958</b> |       |       |          |
| Static ID: HI0000331-004                         |                |            |                  |            |                                |                                   |       |       |          |
| <b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b> |                |            |                  |            |                                |                                   |       |       |          |
| 12/17/21   | 12/17/21 18:08 |            |                  | (SW 8015B) | (SUB)Gas Fraction Hydrocarbons | ND                                | mg/L  | 0.02  | 1        |
| <b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>  |                |            |                  |            |                                |                                   |       |       |          |
| 12/20/21   | 12/21/21 15:13 |            |                  | (SW 8015B) | TPH Diesel                     | ND                                | mg/L  | 0.025 | 1        |
| 12/20/21   | 12/21/21 15:13 |            |                  | (SW 8015B) | TPH Motor Oil                  | ND                                | mg/L  | 0.05  | 1        |
| <b>EPA 8015 - Jet Fuel 5 C8-C18</b>              |                |            |                  |            |                                |                                   |       |       |          |
| 12/20/21   | 12/21/21 15:13 |            |                  | (EPA 8015) | Jet Fuel 5                     | ND                                | mg/L  | 0.05  | 1        |
| <b>EPA 625 - 625PAH in ug/L</b>                  |                |            |                  |            |                                |                                   |       |       |          |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 1-Methylnaphthalene            | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 1-Methylphenanthrene           | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,3,5-Trimethylnaphthalene     | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4,6-Trichlorophenol          | NA                                | ug/L  | 0.1   | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Dimethylnaphthalene        | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Methylnaphthalene            | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Acenaphthene                   | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Acenaphthylene                 | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Anthracene                     | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benz(a)Anthracene              | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(a)pyrene                 | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(b)fluoranthene           | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(e)pyrene                 | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(g,h,i)perylene           | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(k)fluoranthene           | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Biphenyl                       | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Chrysene                       | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenz(a,h)Anthracene          | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenzo(a,l)pyrene             | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenzothiophene               | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Fluoranthene                   | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Fluorene                       | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Indeno(1,2,3,c,d)Pyrene        | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Naphthalene                    | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Pentachlorophenol              | NA                                | ug/L  | 0.1   | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Perylene                       | ND                                | ug/L  | 0.005 | 1        |
| 12/22/21   | 12/25/21 00:00 |            |                  | (EPA 625)  | Phenanthrene                   | ND                                | ug/L  | 0.005 | 1        |

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg." Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped   | Analyzed       | Prep Batch | Analytical Batch | Method     | Analyte                          | Result | Units | MRL   | Dilution |
|---|----------------|------------|------------------|------------|----------------------------------|--------|-------|-------|----------|
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Pyrene                           | ND     | ug/L  | 0.005 | 1        |
| <b>EPA 8015 - Jet Fuel 8 C8-C18</b>                   |                |            |                  |            |                                  |        |       |       |          |
|   | 12/21/21 15:13 |            |                  | (EPA 8015) | Jet Fuel 8                       | ND     | mg/L  | 0.05  | 1        |
| <b>EPA 625 - 625 Acid Extractable in ug/L</b>         |                |            |                  |            |                                  |        |       |       |          |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4,5-Trichlorophenol            | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4,6-Trichlorophenol            | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4-Dichlorophenol               | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4-Dinitrophenol                | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Dichlorophenol               | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Di-tert-butyl-4-methylphenol | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Di-tert-butylphenol          | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Chlorophenol                   | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Methylphenol                   | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Nitrophenol                    | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4,6-Dinitro-2-methylphenol       | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Chloro-3-methyl phenol         | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Methylphenol                   | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Nitrophenol                    | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 6-tert-Butyl-2,4-dimethylphenol  | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzoic acid                     | 1.89   | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzyl alcohol                   | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | pentachlorophenol                | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Phenol                           | ND     | ug/L  | 0.2   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | p-tert-Butylphenol               | ND     | ug/L  | 0.1   | 1        |
| <b>EPA 625 - 625 Base Neutral Extractable in ug/L</b> |                |            |                  |            |                                  |        |       |       |          |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Chloronaphthalene              | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Nitroaniline                   | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 3-Nitroaniline                   | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Bromophenylphenyl Ether        | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Chlorophenylphenyl Ether       | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Nitroaniline                   | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Aniline                          | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzidine                        | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | bis(2-Chloroethoxy)methane       | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | bis(2-Chloroethyl)ether          | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | bis(2-Chloroisopropyl) ether     | ND     | ug/L  | 0.1   | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenzofuran                     | ND     | ug/L  | 0.1   | 1        |

Rounding on totals after summation.  
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**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.™ Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped                                      | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                       | Result  | Units | MRL  | Dilution |
|--|----------------|------------|------------------|-------------|-------------------------------|---------|-------|------|----------|
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | Disalicylideneopropanediamine | ND      | ug/L  | 0.1  | 1        |
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | Hexachloroethane              | ND      | ug/L  | 0.1  | 1        |
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | Nitrobenzene                  | ND      | ug/L  | 0.1  | 1        |
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | N-Nitrosodi-N-propylamine     | ND      | ug/L  | 0.1  | 1        |
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | N-Nitrosodiphenylamine        | ND      | ug/L  | 0.1  | 1        |
| 12/22/21                                     | 12/25/21 00:00 |            |                  | (EPA 625)   | p-Chloroaniline               | ND      | ug/L  | 0.1  | 1        |
| <b>SW8015C - Ethanol</b>                     |                |            |                  |             |                               |         |       |      |          |
|  | 12/17/21 13:41 |            |                  | (SW8015C)   | Ethanol                       | ND      | ug/L  | 2000 | 1        |
| <b>EPA 524.2 - Volatile Organics by GCMS</b> |                |            |                  |             |                               |         |       |      |          |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1,1,2-Tetrachloroethane     | ND (VC) | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1,1-Trichloroethane         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1,2,2-Tetrachloroethane     | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1,2-Trichloroethane         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloroethane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloroethylene          | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloropropene           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2,3-Trichlorobenzene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2,3-Trichloropropane        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trichlorobenzene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trimethylbenzene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloropropane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,3,5-Trimethylbenzene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,3-Dichloropropane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 2,2-Dichloropropane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 2-Butanone (MEK)              | ND      | ug/L  | 5.0  | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 2-Hexanone                    | ND      | ug/L  | 10   | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 4-Methyl-2-Pentanone (MIBK)   | ND      | ug/L  | 5.0  | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Acetone                       | ND (FB) | ug/L  | 500  | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Benzene                       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromobenzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromochloromethane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromodichloromethane          | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromoethane                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromoform                     | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Bromomethane (Methyl Bromide) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21                                     | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Carbon disulfide              | ND      | ug/L  | 0.50 | 1        |

Rounding on totals after summation.  
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**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

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 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                        | Result  | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|--------------------------------|---------|-------|------|----------|
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Carbon Tetrachloride           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Chlorobenzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Chlorodibromomethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Chloroethane                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Chloroform (Trichloromethane)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Chloromethane(Methyl Chloride) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | cis-1,2-Dichloroethylene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | cis-1,3-Dichloropropene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Dibromomethane                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Dichlorodifluoromethane        | ND (LK) | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Dichloromethane                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Di-isopropyl ether             | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Ethyl benzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Hexachlorobutadiene            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Isopropylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | m,p-Xylenes                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | m-Dichlorobenzene (1,3-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Methyl Tert-butyl ether (MTBE) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Naphthalene                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | n-Butylbenzene                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | n-Propylbenzene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | o-Chlorotoluene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | o-Dichlorobenzene (1,2-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | o-Xylene                       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | p-Chlorotoluene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | p-Dichlorobenzene (1,4-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | p-Isopropyltoluene             | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | sec-Butylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Styrene                        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | tert-amyl Methyl Ether         | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | tert-Butyl Ethyl Ether         | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | tert-Butylbenzene              | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Tetrachloroethylene (PCE)      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Toluene                        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Total 1,3-Dichloropropene      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Total THM                      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Total xylenes                  | ND      | ug/L  | 0.50 | 1        |

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 (Albuquerque+)

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 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                             | Result | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|-------------------------------------|--------|-------|------|----------|
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | trans-1,2-Dichloroethylene          | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | trans-1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Trichloroethylene (TCE)             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Trichlorofluoromethane              | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Trichlorotrifluoroethane(Freon 113) | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Vinyl chloride (VC)                 | ND     | ug/L  | 0.30 | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane-d4               | 101    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | 4-Bromofluorobenzene                | 102    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:05 | 1374409    | 1374413          | (EPA 524.2) | Toluene-d8                          | 95     | %     |      | 1        |

**TRAVEL BLANK (202112160537)**

Sampled on 12/15/2021 0958

**SW 8015B - (SUB)Gas Fraction Hydrocarbons**

|          |                |  |  |            |                                |    |      |      |   |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|
| 12/17/21 | 12/17/21 18:45 |  |  | (SW 8015B) | (SUB)Gas Fraction Hydrocarbons | ND | mg/L | 0.02 | 1 |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|

**EPA 524.2 - Volatile Organics by GCMS**

|          |                |         |         |             |                             |         |      |      |   |
|----------|----------------|---------|---------|-------------|-----------------------------|---------|------|------|---|
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1,1,2-Tetrachloroethane   | ND (VC) | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1,1-Trichloroethane       | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1,2,2-Tetrachloroethane   | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1,2-Trichloroethane       | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloroethane          | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloroethylene        | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloropropene         | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2,3-Trichlorobenzene      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2,3-Trichloropropane      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2,4-Trichlorobenzene      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2,4-Trimethylbenzene      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2-Dichloroethane          | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,2-Dichloropropane         | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,3,5-Trimethylbenzene      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 1,3-Dichloropropane         | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 2,2-Dichloropropane         | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 2-Butanone (MEK)            | ND      | ug/L | 5.0  | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 2-Hexanone                  | ND      | ug/L | 10   | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | 4-Methyl-2-Pentanone (MIBK) | ND      | ug/L | 5.0  | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | Acetone                     | ND      | ug/L | 500  | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | Benzene                     | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | Bromobenzene                | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 20:27 | 1374409 | 1374413 | (EPA 524.2) | Bromochloromethane          | ND      | ug/L | 0.50 | 1 |

Rounding on totals after summation.  
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**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                        | Result  | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|--------------------------------|---------|-------|------|----------|
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Bromodichloromethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Bromoethane                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Bromoform                      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Bromomethane (Methyl Bromide)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Carbon disulfide               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Carbon Tetrachloride           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Chlorobenzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Chlorodibromomethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Chloroethane                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Chloroform (Trichloromethane)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Chloromethane(Methyl Chloride) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | cis-1,2-Dichloroethylene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | cis-1,3-Dichloropropene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Dibromomethane                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Dichlorodifluoromethane        | ND (LK) | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Dichloromethane                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Di-isopropyl ether             | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Ethyl benzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Hexachlorobutadiene            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Isopropylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | m,p-Xylenes                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | m-Dichlorobenzene (1,3-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Methyl Tert-butyl ether (MTBE) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Naphthalene                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | n-Butylbenzene                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | n-Propylbenzene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | o-Chlorotoluene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | o-Dichlorobenzene (1,2-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | o-Xylene                       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | p-Chlorotoluene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | p-Dichlorobenzene (1,4-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | p-Isopropyltoluene             | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | sec-Butylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Styrene                        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | tert-amyl Methyl Ether         | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | tert-Butyl Ethyl Ether         | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | tert-Butylbenzene              | ND      | ug/L  | 0.50 | 1        |

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 (Albuquerque+)

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 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                             | Result | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|-------------------------------------|--------|-------|------|----------|
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Tetrachloroethylene (PCE)           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Toluene                             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Total 1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Total THM                           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Total xylenes                       | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | trans-1,2-Dichloroethylene          | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | trans-1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Trichloroethylene (TCE)             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Trichlorofluoromethane              | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Trichlorotrifluoroethane(Freon 113) | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Vinyl chloride (VC)                 | ND     | ug/L  | 0.30 | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane-d4               | 102    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | 4-Bromofluorobenzene                | 103    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:27 | 1374409    | 1374413          | (EPA 524.2) | Toluene-d8                          | 96     | %     |      | 1        |

**Halawa Well P2 (202112160538)**

Sampled on 12/15/2021 1117

Static ID: HI0000331-024

**SW 8015B - (SUB)Gas Fraction Hydrocarbons**

|          |                |  |  |            |                                |    |      |      |   |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|
| 12/17/21 | 12/17/21 19:21 |  |  | (SW 8015B) | (SUB)Gas Fraction Hydrocarbons | ND | mg/L | 0.05 | 1 |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|

**SW 8015B - TPH 8015 Diesel and Motor Oil**

|          |                |  |  |            |               |    |      |       |   |
|----------|----------------|--|--|------------|---------------|----|------|-------|---|
| 12/20/21 | 12/21/21 16:42 |  |  | (SW 8015B) | TPH Diesel    | ND | mg/L | 0.024 | 1 |
| 12/20/21 | 12/21/21 16:42 |  |  | (SW 8015B) | TPH Motor Oil | ND | mg/L | 0.048 | 1 |

**EPA 8015 - Jet Fuel 5 C8-C18**

|          |                |  |  |            |            |    |      |       |   |
|----------|----------------|--|--|------------|------------|----|------|-------|---|
| 12/20/21 | 12/21/21 16:42 |  |  | (EPA 8015) | Jet Fuel 5 | ND | mg/L | 0.048 | 1 |
|----------|----------------|--|--|------------|------------|----|------|-------|---|

**EPA 625 - 625PAH in ug/L**

|  |                |  |  |           |                            |    |      |       |   |
|--|----------------|--|--|-----------|----------------------------|----|------|-------|---|
|  | 12/25/21 00:00 |  |  | (EPA 625) | 1-Methylnaphthalene        | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | 1-Methylphenanthrene       | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | 2,3,5-Trimethylnaphthalene | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | 2,4,6-Trichlorophenol      | NA | ug/L | 0.1   | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | 2,6-Dimethylnaphthalene    | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | 2-Methylnaphthalene        | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Acenaphthene               | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Acenaphthylene             | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Anthracene                 | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Benz(a)Anthracene          | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Benzo(a)pyrene             | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Benzo(b)fluoranthene       | ND | ug/L | 0.005 | 1 |
|  | 12/25/21 00:00 |  |  | (EPA 625) | Benzo(e)pyrene             | ND | ug/L | 0.005 | 1 |

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Samples Received on:  
 12/16/2021 1409

| Prepped                                       | Analyzed       | Prep Batch | Analytical Batch | Method     | Analyte                          | Result | Units | MRL   | Dilution |
|---|----------------|------------|------------------|------------|----------------------------------|--------|-------|-------|----------|
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(g,h,i)perylene             | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzo(k)fluoranthene             | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Biphenyl                         | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Chrysene                         | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenz(a,h)Anthracene            | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenzo(a,l)pyrene               | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Dibenzothiophene                 | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Fluoranthene                     | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Fluorene                         | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Indeno(1,2,3,c,d)Pyrene          | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Naphthalene                      | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Pentachlorophenol                | NA     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Perylene                         | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Phenanthrene                     | ND     | ug/L  | 0.005 | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Pyrene                           | ND     | ug/L  | 0.005 | 1        |
| <b>EPA 8015 - Jet Fuel 8 C8-C18</b>           |                |            |                  |            |                                  |        |       |       |          |
|   | 12/21/21 16:42 |            |                  | (EPA 8015) | Jet Fuel 8                       | ND     | mg/L  | 0.048 | 1        |
| <b>EPA 625 - 625 Acid Extractable in ug/L</b> |                |            |                  |            |                                  |        |       |       |          |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4,5-Trichlorophenol            | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4,6-Trichlorophenol            | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4-Dichlorophenol               | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,4-Dinitrophenol                | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Dichlorophenol               | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Di-tert-butyl-4-methylphenol | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2,6-Di-tert-butylphenol          | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Chlorophenol                   | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Methylphenol                   | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 2-Nitrophenol                    | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 4,6-Dinitro-2-methylphenol       | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Chloro-3-methyl phenol         | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Methylphenol                   | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 4-Nitrophenol                    | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | 6-tert-Butyl-2,4-dimethylphenol  | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzoic acid                     | 1.64   | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Benzyl alcohol                   | ND     | ug/L  | 0.2   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | pentachlorophenol                | ND     | ug/L  | 0.1   | 1        |
|   | 12/25/21 00:00 |            |                  | (EPA 625)  | Phenol                           | ND     | ug/L  | 0.2   | 1        |

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 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped   | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                      | Result  | Units | MRL  | Dilution |
|---|----------------|------------|------------------|-------------|------------------------------|---------|-------|------|----------|
|   | 12/25/21 00:00 |            |                  | (EPA 625)   | p-tert-Butylphenol           | ND      | ug/L  | 0.1  | 1        |
| <b>EPA 625 - 625 Base Neutral Extractable in ug/L</b> |                |            |                  |             |                              |         |       |      |          |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 2-Chloronaphthalene          | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 2-Nitroaniline               | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 3-Nitroaniline               | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 4-Bromophenylphenyl Ether    | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 4-Chlorophenylphenyl Ether   | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | 4-Nitroaniline               | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Aniline                      | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Benzidine                    | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | bis(2-Chloroethoxy)methane   | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | bis(2-Chloroethyl)ether      | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | bis(2-Chloroisopropyl) ether | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Dibenzofuran                 | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Disalicylidenepropanediamine | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Hexachloroethane             | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | Nitrobenzene                 | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | N-Nitrosodi-N-propylamine    | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | N-Nitrosodiphenylamine       | ND      | ug/L  | 0.1  | 1        |
| 12/22/21  | 12/25/21 00:00 |            |                  | (EPA 625)   | p-Chloroaniline              | ND      | ug/L  | 0.1  | 1        |
| <b>SW8015C - Ethanol</b>                              |                |            |                  |             |                              |         |       |      |          |
|   | 12/17/21 14:23 |            |                  | (SW8015C)   | Ethanol                      | ND      | ug/L  | 2000 | 1        |
| <b>EPA 524.2 - Volatile Organics by GCMS</b>          |                |            |                  |             |                              |         |       |      |          |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1,1,2-Tetrachloroethane    | ND (VC) | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1,1-Trichloroethane        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1,2,2-Tetrachloroethane    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1,2-Trichloroethane        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloroethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloroethylene         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,1-Dichloropropene          | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2,3-Trichlorobenzene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2,3-Trichloropropane       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trichlorobenzene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trimethylbenzene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloropropane          | ND      | ug/L  | 0.50 | 1        |
| 12/16/21  | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,3,5-Trimethylbenzene       | ND      | ug/L  | 0.50 | 1        |

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                        | Result  | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|--------------------------------|---------|-------|------|----------|
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,3-Dichloropropane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 2,2-Dichloropropane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 2-Butanone (MEK)               | ND      | ug/L  | 5.0  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 2-Hexanone                     | ND      | ug/L  | 10   | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 4-Methyl-2-Pentanone (MIBK)    | ND      | ug/L  | 5.0  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Acetone                        | ND (FB) | ug/L  | 500  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Benzene                        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromobenzene                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromochloromethane             | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromodichloromethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromoethane                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromoform                      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Bromomethane (Methyl Bromide)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Carbon disulfide               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Carbon Tetrachloride           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Chlorobenzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Chlorodibromomethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Chloroethane                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Chloroform (Trichloromethane)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Chloromethane(Methyl Chloride) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | cis-1,2-Dichloroethylene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | cis-1,3-Dichloropropene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Dibromomethane                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Dichlorodifluoromethane        | ND (LK) | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Dichloromethane                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Di-isopropyl ether             | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Ethyl benzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Hexachlorobutadiene            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Isopropylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | m,p-Xylenes                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | m-Dichlorobenzene (1,3-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Methyl Tert-butyl ether (MTBE) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Naphthalene                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | n-Butylbenzene                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | n-Propylbenzene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | o-Chlorotoluene                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | o-Dichlorobenzene (1,2-DCB)    | ND      | ug/L  | 0.50 | 1        |

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| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                             | Result | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|-------------------------------------|--------|-------|------|----------|
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | o-Xylene                            | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | p-Chlorotoluene                     | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | p-Dichlorobenzene (1,4-DCB)         | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | p-Isopropyltoluene                  | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | sec-Butylbenzene                    | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Styrene                             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | tert-amyl Methyl Ether              | ND     | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | tert-Butyl Ethyl Ether              | ND     | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | tert-Butylbenzene                   | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Tetrachloroethylene (PCE)           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Toluene                             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Total 1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Total THM                           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Total xylenes                       | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | trans-1,2-Dichloroethylene          | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | trans-1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Trichloroethylene (TCE)             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Trichlorofluoromethane              | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Trichlorotrifluoroethane(Freon 113) | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Vinyl chloride (VC)                 | ND     | ug/L  | 0.30 | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane-d4               | 100    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | 4-Bromofluorobenzene                | 100    | %     |      | 1        |
| 12/16/21 | 12/16/21 20:49 | 1374409    | 1374413          | (EPA 524.2) | Toluene-d8                          | 97     | %     |      | 1        |

**TRAVEL BLANK (202112160539)**

Sampled on 12/15/2021 1117

**SW 8015B - (SUB)Gas Fraction Hydrocarbons**

|          |                |  |  |            |                                |    |      |      |   |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|
| 12/17/21 | 12/17/21 19:57 |  |  | (SW 8015B) | (SUB)Gas Fraction Hydrocarbons | ND | mg/L | 0.05 | 1 |
|----------|----------------|--|--|------------|--------------------------------|----|------|------|---|

**EPA 524.2 - Volatile Organics by GCMS**

|          |                |         |         |             |                           |         |      |      |   |
|----------|----------------|---------|---------|-------------|---------------------------|---------|------|------|---|
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1,1,2-Tetrachloroethane | ND (VC) | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1,1-Trichloroethane     | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1,2,2-Tetrachloroethane | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1,2-Trichloroethane     | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloroethane        | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloroethylene      | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,1-Dichloropropene       | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,2,3-Trichlorobenzene    | ND      | ug/L | 0.50 | 1 |
| 12/16/21 | 12/16/21 21:11 | 1374409 | 1374413 | (EPA 524.2) | 1,2,3-Trichloropropane    | ND      | ug/L | 0.50 | 1 |

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

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 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                        | Result  | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|--------------------------------|---------|-------|------|----------|
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trichlorobenzene         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,2,4-Trimethylbenzene         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane             | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloropropane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,3,5-Trimethylbenzene         | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,3-Dichloropropane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 2,2-Dichloropropane            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 2-Butanone (MEK)               | ND      | ug/L  | 5.0  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 2-Hexanone                     | ND      | ug/L  | 10   | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 4-Methyl-2-Pentanone (MIBK)    | ND      | ug/L  | 5.0  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Acetone                        | ND      | ug/L  | 500  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Benzene                        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromobenzene                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromochloromethane             | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromodichloromethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromoethane                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromoform                      | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Bromomethane (Methyl Bromide)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Carbon disulfide               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Carbon Tetrachloride           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Chlorobenzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Chlorodibromomethane           | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Chloroethane                   | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Chloroform (Trichloromethane)  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Chloromethane(Methyl Chloride) | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | cis-1,2-Dichloroethylene       | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | cis-1,3-Dichloropropene        | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Dibromomethane                 | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Dichlorodifluoromethane        | ND (LK) | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Dichloromethane                | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Di-isopropyl ether             | ND      | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Ethyl benzene                  | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Hexachlorobutadiene            | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Isopropylbenzene               | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | m,p-Xylenes                    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | m-Dichlorobenzene (1,3-DCB)    | ND      | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Methyl Tert-butyl ether (MTBE) | ND      | ug/L  | 0.50 | 1        |

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.

Tel: (626) 386-1100  
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 1 800 566 LABS (1 800 566 5227)

**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Prepped  | Analyzed       | Prep Batch | Analytical Batch | Method      | Analyte                             | Result | Units | MRL  | Dilution |
|----------|----------------|------------|------------------|-------------|-------------------------------------|--------|-------|------|----------|
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Naphthalene                         | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | n-Butylbenzene                      | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | n-Propylbenzene                     | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | o-Chlorotoluene                     | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | o-Dichlorobenzene (1,2-DCB)         | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | o-Xylene                            | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | p-Chlorotoluene                     | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | p-Dichlorobenzene (1,4-DCB)         | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | p-Isopropyltoluene                  | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | sec-Butylbenzene                    | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Styrene                             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | tert-amyl Methyl Ether              | ND     | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | tert-Butyl Ethyl Ether              | ND     | ug/L  | 3.0  | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | tert-Butylbenzene                   | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Tetrachloroethylene (PCE)           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Toluene                             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Total 1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Total THM                           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Total xylenes                       | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | trans-1,2-Dichloroethylene          | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | trans-1,3-Dichloropropene           | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Trichloroethylene (TCE)             | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Trichlorofluoromethane              | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Trichlorotrifluoroethane(Freon 113) | ND     | ug/L  | 0.50 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Vinyl chloride (VC)                 | ND     | ug/L  | 0.30 | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 1,2-Dichloroethane-d4               | 104    | %     |      | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | 4-Bromofluorobenzene                | 106    | %     |      | 1        |
| 12/16/21 | 12/16/21 21:11 | 1374409    | 1374413          | (EPA 524.2) | Toluene-d8                          | 98     | %     |      | 1        |

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**Report:** 975524  
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(Albuquerque+)

Honolulu Board of Water Supply

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**Volatile Organics by GCMS**

**Prep Batch: 1374409 Analytical Batch: 1374413**

|              |                |
|--------------|----------------|
| 202112160536 | Aiea Well P2   |
| 202112160537 | TRAVEL BLANK   |
| 202112160538 | Halawa Well P2 |
| 202112160539 | TRAVEL BLANK   |

**Analysis Date: 12/16/2021**

Analyzed by: TG9W  
Analyzed by: TG9W  
Analyzed by: TG9W  
Analyzed by: TG9W

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Report: 975524  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

| QC Type                                       | Analyte                   | Native | Spiked | Recovered | Units                            | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---|---------------------------|--------|--------|-----------|----------------------------------|----------|------------|--------------|------|
| <b>Volatile Organics by GCMS by EPA 524.2</b> |                           |        |        |           |                                  |          |            |              |      |
| <b>Analytical Batch: 1374413</b>              |                           |        |        |           | <b>Analysis Date: 12/16/2021</b> |          |            |              |      |
| LCS1  | 1,1,1,2-Tetrachloroethane |        | 5      | 5.17      | ug/L                             | 103      | (70-130)   |              |      |
| LCS2  | 1,1,1,2-Tetrachloroethane |        | 5      | 4.96      | ug/L                             | 99       | (70-130)   | 20           | 4.2  |
| MBLK  | 1,1,1,2-Tetrachloroethane |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1,1,2-Tetrachloroethane |        | 0.5    | 0.410     | ug/L                             | 82       | (50-150)   |              |      |
| LCS1  | 1,1,1-Trichloroethane     |        | 5      | 4.73      | ug/L                             | 95       | (70-130)   |              |      |
| LCS2  | 1,1,1-Trichloroethane     |        | 5      | 4.67      | ug/L                             | 93       | (70-130)   | 20           | 1.3  |
| MBLK  | 1,1,1-Trichloroethane     |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1,1-Trichloroethane     |        | 0.5    | 0.460     | ug/L                             | 92       | (50-150)   |              |      |
| LCS1  | 1,1,2,2-Tetrachloroethane |        | 5      | 5.08      | ug/L                             | 102      | (70-130)   |              |      |
| LCS2  | 1,1,2,2-Tetrachloroethane |        | 5      | 4.95      | ug/L                             | 99       | (70-130)   | 20           | 2.6  |
| MBLK  | 1,1,2,2-Tetrachloroethane |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1,2,2-Tetrachloroethane |        | 0.5    | 0.460     | ug/L                             | 92       | (50-150)   |              |      |
| LCS1  | 1,1,2-Trichloroethane     |        | 5      | 4.69      | ug/L                             | 94       | (70-130)   |              |      |
| LCS2  | 1,1,2-Trichloroethane     |        | 5      | 4.71      | ug/L                             | 94       | (70-130)   | 20           | 0.43 |
| MBLK  | 1,1,2-Trichloroethane     |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1,2-Trichloroethane     |        | 0.5    | 0.450     | ug/L                             | 90       | (50-150)   |              |      |
| LCS1  | 1,1-Dichloroethane        |        | 5      | 5.10      | ug/L                             | 102      | (70-130)   |              |      |
| LCS2  | 1,1-Dichloroethane        |        | 5      | 4.92      | ug/L                             | 98       | (70-130)   | 20           | 3.6  |
| MBLK  | 1,1-Dichloroethane        |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1-Dichloroethane        |        | 0.5    | 0.550     | ug/L                             | 110      | (50-150)   |              |      |
| LCS1  | 1,1-Dichloroethylene      |        | 5      | 5.41      | ug/L                             | 108      | (70-130)   |              |      |
| LCS2  | 1,1-Dichloroethylene      |        | 5      | 5.34      | ug/L                             | 107      | (70-130)   | 20           | 1.3  |
| MBLK  | 1,1-Dichloroethylene      |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1-Dichloroethylene      |        | 0.5    | 0.610     | ug/L                             | 122      | (50-150)   |              |      |
| LCS1  | 1,1-Dichloropropene       |        | 5      | 4.86      | ug/L                             | 97       | (70-130)   |              |      |
| LCS2  | 1,1-Dichloropropene       |        | 5      | 4.70      | ug/L                             | 94       | (70-130)   | 20           | 3.4  |
| MBLK  | 1,1-Dichloropropene       |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,1-Dichloropropene       |        | 0.5    | 0.490     | ug/L                             | 98       | (50-150)   |              |      |
| LCS1  | 1,2,3-Trichlorobenzene    |        | 5      | 4.96      | ug/L                             | 99       | (70-130)   |              |      |
| LCS2  | 1,2,3-Trichlorobenzene    |        | 5      | 4.55      | ug/L                             | 91       | (70-130)   | 20           | 8.6  |
| MBLK  | 1,2,3-Trichlorobenzene    |        |        | <0.5      | ug/L                             |          |            |              |      |
| MRL_CHK                                       | 1,2,3-Trichlorobenzene    |        | 0.5    | 0.470     | ug/L                             | 94       | (50-150)   |              |      |
| LCS1  | 1,2,3-Trichloropropane    |        | 5      | 4.76      | ug/L                             | 95       | (70-130)   |              |      |
| LCS2  | 1,2,3-Trichloropropane    |        | 5      | 4.60      | ug/L                             | 92       | (70-130)   | 20           | 3.4  |
| MBLK  | 1,2,3-Trichloropropane    |        |        | <0.5      | ug/L                             |          |            |              |      |

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 975524  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

| QC Type | Analyte                   | Native | Spiked | Recovered | Units | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---------|---------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| MRL_CHK | 1,2,3-Trichloropropane    |        | 0.5    | 0.440     | ug/L  | 88       | (50-150)   |              |      |
| LCS1    | 1,2,4-Trichlorobenzene    |        | 5      | 4.88      | ug/L  | 98       | (70-130)   |              |      |
| LCS2    | 1,2,4-Trichlorobenzene    |        | 5      | 4.73      | ug/L  | 95       | (70-130)   | 20           | 3.1  |
| MBLK    | 1,2,4-Trichlorobenzene    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,2,4-Trichlorobenzene    |        | 0.5    | 0.470     | ug/L  | 94       | (50-150)   |              |      |
| LCS1    | 1,2,4-Trimethylbenzene    |        | 5      | 4.96      | ug/L  | 99       | (70-130)   |              |      |
| LCS2    | 1,2,4-Trimethylbenzene    |        | 5      | 4.86      | ug/L  | 97       | (70-130)   | 20           | 2.0  |
| MBLK    | 1,2,4-Trimethylbenzene    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,2,4-Trimethylbenzene    |        | 0.5    | 0.470     | ug/L  | 94       | (50-150)   |              |      |
| LCS1    | 1,2-Dichloroethane        |        | 5      | 4.96      | ug/L  | 99       | (70-130)   |              |      |
| LCS2    | 1,2-Dichloroethane        |        | 5      | 4.96      | ug/L  | 99       | (70-130)   | 20           | 0.0  |
| MBLK    | 1,2-Dichloroethane        |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,2-Dichloroethane        |        | 0.5    | 0.540     | ug/L  | 108      | (50-150)   |              |      |
| LCS1    | 1,2-Dichloroethane-d4 (S) |        | 5      | 98.6      | %     | 99       | (70-130)   |              |      |
| LCS2    | 1,2-Dichloroethane-d4 (S) |        | 5      | 101       | %     | 101      | (70-130)   |              |      |
| MBLK    | 1,2-Dichloroethane-d4 (S) |        |        | 101       | %     | 101      | (70-130)   |              |      |
| MRL_CHK | 1,2-Dichloroethane-d4 (S) |        | 5      | 103       | %     | 103      | (70-130)   |              |      |
| MRLLW   | 1,2-Dichloroethane-d4 (S) |        | 5      | 104       | %     | 104      | (70-130)   |              |      |
| LCS1    | 1,2-Dichloropropane       |        | 5      | 5.10      | ug/L  | 102      | (70-130)   |              |      |
| LCS2    | 1,2-Dichloropropane       |        | 5      | 4.96      | ug/L  | 99       | (70-130)   | 20           | 2.8  |
| MBLK    | 1,2-Dichloropropane       |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,2-Dichloropropane       |        | 0.5    | 0.520     | ug/L  | 104      | (50-150)   |              |      |
| LCS1    | 1,3,5-Trimethylbenzene    |        | 5      | 5.11      | ug/L  | 102      | (70-130)   |              |      |
| LCS2    | 1,3,5-Trimethylbenzene    |        | 5      | 4.95      | ug/L  | 99       | (70-130)   | 20           | 3.2  |
| MBLK    | 1,3,5-Trimethylbenzene    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,3,5-Trimethylbenzene    |        | 0.5    | 0.450     | ug/L  | 90       | (50-150)   |              |      |
| LCS1    | 1,3-Dichloropropane       |        | 5      | 4.76      | ug/L  | 95       | (70-130)   |              |      |
| LCS2    | 1,3-Dichloropropane       |        | 5      | 4.81      | ug/L  | 96       | (70-130)   | 20           | 1.0  |
| MBLK    | 1,3-Dichloropropane       |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 1,3-Dichloropropane       |        | 0.5    | 0.470     | ug/L  | 94       | (50-150)   |              |      |
| LCS1    | 2,2-Dichloropropane       |        | 5      | 4.64      | ug/L  | 93       | (70-130)   |              |      |
| LCS2    | 2,2-Dichloropropane       |        | 5      | 4.48      | ug/L  | 90       | (70-130)   | 20           | 3.5  |
| MBLK    | 2,2-Dichloropropane       |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | 2,2-Dichloropropane       |        | 0.5    | 0.470     | ug/L  | 94       | (50-150)   |              |      |
| LCS1    | 2-Butanone (MEK)          |        | 50     | 52.1      | ug/L  | 104      | (70-130)   |              |      |
| LCS2    | 2-Butanone (MEK)          |        | 50     | 51.9      | ug/L  | 104      | (70-130)   | 20           | 0.39 |
| MBLK    | 2-Butanone (MEK)          |        |        | <5.0      | ug/L  |          |            |              |      |
| MRL_CHK | 2-Butanone (MEK)          |        | 5      | 5.05      | ug/L  | 101      | (50-150)   |              |      |

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 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

| QC Type | Analyte                     | Native | Spiked | Recovered | Units | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---------|-----------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| LCS1    | 2-Hexanone                  |        | 50     | 45.2      | ug/L  | 91       | (70-130)   |              |      |
| LCS2    | 2-Hexanone                  |        | 50     | 44.9      | ug/L  | 90       | (70-130)   | 20           | 0.89 |
| MBLK    | 2-Hexanone                  |        |        | <5.0      | ug/L  |          |            |              |      |
| MRL_CHK | 2-Hexanone                  |        | 5      | 4.31      | ug/L  | 86       | (50-150)   |              |      |
| LCS1    | 4-Bromofluorobenzene (S)    |        | 5      | 100       | %     | 100      | (70-130)   |              |      |
| LCS2    | 4-Bromofluorobenzene (S)    |        | 5      | 104       | %     | 104      | (70-130)   |              |      |
| MBLK    | 4-Bromofluorobenzene (S)    |        |        | 104       | %     | 104      | (70-130)   |              |      |
| MRL_CHK | 4-Bromofluorobenzene (S)    |        | 5      | 98.0      | %     | 98       | (70-130)   |              |      |
| MRL_W   | 4-Bromofluorobenzene (S)    |        | 5      | 103       | %     | 103      | (70-130)   |              |      |
| LCS1    | 4-Methyl-2-Pentanone (MIBK) |        | 50     | 46.1      | ug/L  | 92       | (70-130)   |              |      |
| LCS2    | 4-Methyl-2-Pentanone (MIBK) |        | 50     | 46.0      | ug/L  | 92       | (70-130)   | 20           | 0.22 |
| MBLK    | 4-Methyl-2-Pentanone (MIBK) |        |        | <5.0      | ug/L  |          |            |              |      |
| MRL_CHK | 4-Methyl-2-Pentanone (MIBK) |        | 5      | 4.43      | ug/L  | 89       | (50-150)   |              |      |
| LCS1    | Acetone                     |        | 50     | 52.8      | ug/L  | 106      | (70-130)   |              |      |
| LCS2    | Acetone                     |        | 50     | 51.4      | ug/L  | 103      | (70-130)   | 20           | 2.7  |
| MBLK    | Acetone                     |        |        | <10       | ug/L  |          |            |              |      |
| MRL_CHK | Acetone                     |        | 5      | 6.25      | ug/L  | 125      | (50-150)   |              |      |
| LCS1    | Benzene                     |        | 5      | 5.02      | ug/L  | 100      | (70-130)   |              |      |
| LCS2    | Benzene                     |        | 5      | 4.90      | ug/L  | 98       | (70-130)   | 20           | 2.4  |
| MBLK    | Benzene                     |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Benzene                     |        | 0.5    | 0.540     | ug/L  | 108      | (50-150)   |              |      |
| LCS1    | Bromobenzene                |        | 5      | 5.04      | ug/L  | 101      | (70-130)   |              |      |
| LCS2    | Bromobenzene                |        | 5      | 4.90      | ug/L  | 98       | (70-130)   | 20           | 2.8  |
| MBLK    | Bromobenzene                |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromobenzene                |        | 0.5    | 0.520     | ug/L  | 104      | (50-150)   |              |      |
| LCS1    | Bromochloromethane          |        | 5      | 4.84      | ug/L  | 97       | (70-130)   |              |      |
| LCS2    | Bromochloromethane          |        | 5      | 4.72      | ug/L  | 94       | (70-130)   | 20           | 2.5  |
| MBLK    | Bromochloromethane          |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromochloromethane          |        | 0.5    | 0.480     | ug/L  | 96       | (50-150)   |              |      |
| LCS1    | Bromodichloromethane        |        | 5      | 4.90      | ug/L  | 98       | (70-130)   |              |      |
| LCS2    | Bromodichloromethane        |        | 5      | 4.77      | ug/L  | 95       | (70-130)   | 20           | 2.7  |
| MBLK    | Bromodichloromethane        |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromodichloromethane        |        | 0.5    | 0.440     | ug/L  | 88       | (50-150)   |              |      |
| LCS1    | Bromoethane                 |        | 5      | 5.21      | ug/L  | 104      | (70-130)   |              |      |
| LCS2    | Bromoethane                 |        | 5      | 4.99      | ug/L  | 100      | (70-130)   | 20           | 4.3  |
| MBLK    | Bromoethane                 |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromoethane                 |        | 0.5    | 0.510     | ug/L  | 102      | (50-150)   |              |      |
| LCS1    | Bromoform                   |        | 5      | 5.09      | ug/L  | 102      | (70-130)   |              |      |

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Report: 975524  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

| QC Type | Analyte                        | Native | Spiked | Recovered | Units | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---------|--------------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| LCS2    | Bromoform                      |        | 5      | 4.74      | ug/L  | 95       | (70-130)   | 20           | 7.1  |
| MBLK    | Bromoform                      |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromoform                      |        | 0.5    | 0.550     | ug/L  | 110      | (50-150)   |              |      |
| LCS1    | Bromomethane (Methyl Bromide)  |        | 5      | 5.75      | ug/L  | 115      | (70-130)   |              |      |
| LCS2    | Bromomethane (Methyl Bromide)  |        | 5      | 5.84      | ug/L  | 117      | (70-130)   | 20           | 1.6  |
| MBLK    | Bromomethane (Methyl Bromide)  |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Bromomethane (Methyl Bromide)  |        | 0.5    | 0.730     | ug/L  | 146      | (50-150)   |              |      |
| LCS1    | Carbon disulfide               |        | 5      | 5.20      | ug/L  | 104      | (70-130)   |              |      |
| LCS2    | Carbon disulfide               |        | 5      | 5.01      | ug/L  | 100      | (70-130)   | 20           | 3.7  |
| MBLK    | Carbon disulfide               |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Carbon disulfide               |        | 0.5    | 0.440     | ug/L  | 88       | (50-150)   |              |      |
| LCS1    | Carbon Tetrachloride           |        | 5      | 5.08      | ug/L  | 102      | (70-130)   |              |      |
| LCS2    | Carbon Tetrachloride           |        | 5      | 5.06      | ug/L  | 101      | (70-130)   | 20           | 0.39 |
| MBLK    | Carbon Tetrachloride           |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Carbon Tetrachloride           |        | 0.5    | 0.500     | ug/L  | 100      | (50-150)   |              |      |
| LCS1    | Chlorobenzene                  |        | 5      | 5.16      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | Chlorobenzene                  |        | 5      | 5.07      | ug/L  | 101      | (70-130)   | 20           | 1.8  |
| MBLK    | Chlorobenzene                  |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Chlorobenzene                  |        | 0.5    | 0.500     | ug/L  | 100      | (50-150)   |              |      |
| LCS1    | Chlorodibromomethane           |        | 5      | 4.87      | ug/L  | 97       | (70-130)   |              |      |
| LCS2    | Chlorodibromomethane           |        | 5      | 4.69      | ug/L  | 94       | (70-130)   | 20           | 3.8  |
| MBLK    | Chlorodibromomethane           |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Chlorodibromomethane           |        | 0.5    | 0.540     | ug/L  | 108      | (50-150)   |              |      |
| LCS1    | Chloroethane                   |        | 5      | 5.46      | ug/L  | 109      | (70-130)   |              |      |
| LCS2    | Chloroethane                   |        | 5      | 5.37      | ug/L  | 107      | (70-130)   | 20           | 1.7  |
| MBLK    | Chloroethane                   |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Chloroethane                   |        | 0.5    | 0.630     | ug/L  | 126      | (50-150)   |              |      |
| LCS1    | Chloroform (Trichloromethane)  |        | 5      | 4.69      | ug/L  | 94       | (70-130)   |              |      |
| LCS2    | Chloroform (Trichloromethane)  |        | 5      | 4.67      | ug/L  | 93       | (70-130)   | 20           | 0.43 |
| MBLK    | Chloroform (Trichloromethane)  |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Chloroform (Trichloromethane)  |        | 0.5    | 0.510     | ug/L  | 102      | (50-150)   |              |      |
| LCS1    | Chloromethane(Methyl Chloride) |        | 5      | 5.95      | ug/L  | 119      | (70-130)   |              |      |
| LCS2    | Chloromethane(Methyl Chloride) |        | 5      | 5.80      | ug/L  | 116      | (70-130)   | 20           | 2.5  |
| MBLK    | Chloromethane(Methyl Chloride) |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Chloromethane(Methyl Chloride) |        | 0.5    | 0.600     | ug/L  | 120      | (50-150)   |              |      |
| LCS1    | cis-1,2-Dichloroethylene       |        | 5      | 5.09      | ug/L  | 102      | (70-130)   |              |      |
| LCS2    | cis-1,2-Dichloroethylene       |        | 5      | 5.22      | ug/L  | 104      | (70-130)   | 20           | 2.5  |
| MBLK    | cis-1,2-Dichloroethylene       |        |        | <0.5      | ug/L  |          |            |              |      |

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| QC Type | Analyte                  | Native | Spiked | Recovered | Units | Yield(%)   | Limits (%) | RPD Limit(%) | RPD% |
|---------|--------------------------|--------|--------|-----------|-------|------------|------------|--------------|------|
| MRL_CHK | cis-1,2-Dichloroethylene |        | 0.5    | 0.560     | ug/L  | 112        | (50-150)   |              |      |
| LCS1    | cis-1,3-Dichloropropene  |        | 5      | 4.84      | ug/L  | 97         | (70-130)   |              |      |
| LCS2    | cis-1,3-Dichloropropene  |        | 5      | 4.75      | ug/L  | 95         | (70-130)   | 20           | 1.9  |
| MBLK    | cis-1,3-Dichloropropene  |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | cis-1,3-Dichloropropene  |        | 0.5    | 0.360     | ug/L  | 72         | (50-150)   |              |      |
| LCS1    | Dibromomethane           |        | 5      | 4.73      | ug/L  | 95         | (70-130)   |              |      |
| LCS2    | Dibromomethane           |        | 5      | 4.62      | ug/L  | 92         | (70-130)   | 20           | 2.4  |
| MBLK    | Dibromomethane           |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Dibromomethane           |        | 0.5    | 0.480     | ug/L  | 96         | (50-150)   |              |      |
| LCS1    | Dichlorodifluoromethane  |        | 5      | 7.09      | ug/L  | <b>142</b> | (70-130)   |              |      |
| LCS2    | Dichlorodifluoromethane  |        | 5      | 6.66      | ug/L  | <b>133</b> | (70-130)   | 20           | 6.3  |
| MBLK    | Dichlorodifluoromethane  |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Dichlorodifluoromethane  |        | 0.5    | 0.570     | ug/L  | 114        | (50-150)   |              |      |
| LCS1    | Dichloromethane          |        | 5      | 5.39      | ug/L  | 108        | (70-130)   |              |      |
| LCS2    | Dichloromethane          |        | 5      | 5.27      | ug/L  | 105        | (70-130)   | 20           | 2.3  |
| MBLK    | Dichloromethane          |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Dichloromethane          |        | 0.5    | 0.620     | ug/L  | 124        | (50-150)   |              |      |
| LCS1    | Di-isopropyl ether       |        | 5      | 5.09      | ug/L  | 102        | (70-130)   |              |      |
| LCS2    | Di-isopropyl ether       |        | 5      | 5.07      | ug/L  | 101        | (70-130)   | 20           | 0.39 |
| MBLK    | Di-isopropyl ether       |        |        | <3.0      | ug/L  |            |            |              |      |
| MRL_CHK | Di-isopropyl ether       |        | 0.5    | 0.560     | ug/L  | 112        | (50-150)   |              |      |
| LCS1    | Ethyl benzene            |        | 5      | 4.86      | ug/L  | 97         | (70-130)   |              |      |
| LCS2    | Ethyl benzene            |        | 5      | 4.86      | ug/L  | 97         | (70-130)   | 20           | 0.0  |
| MBLK    | Ethyl benzene            |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Ethyl benzene            |        | 0.5    | 0.460     | ug/L  | 92         | (50-150)   |              |      |
| LCS1    | Hexachlorobutadiene      |        | 5      | 4.92      | ug/L  | 98         | (70-130)   |              |      |
| LCS2    | Hexachlorobutadiene      |        | 5      | 4.43      | ug/L  | 89         | (70-130)   | 20           | 11   |
| MBLK    | Hexachlorobutadiene      |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Hexachlorobutadiene      |        | 0.5    | 0.510     | ug/L  | 102        | (50-150)   |              |      |
| LCS1    | Isopropylbenzene         |        | 5      | 5.15      | ug/L  | 103        | (70-130)   |              |      |
| LCS2    | Isopropylbenzene         |        | 5      | 5.00      | ug/L  | 100        | (70-130)   | 20           | 3.0  |
| MBLK    | Isopropylbenzene         |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | Isopropylbenzene         |        | 0.5    | 0.490     | ug/L  | 98         | (50-150)   |              |      |
| LCS1    | m,p-Xylenes              |        | 10     | 9.73      | ug/L  | 97         | (70-130)   |              |      |
| LCS2    | m,p-Xylenes              |        | 10     | 9.70      | ug/L  | 97         | (70-130)   | 20           | 0.31 |
| MBLK    | m,p-Xylenes              |        |        | <0.5      | ug/L  |            |            |              |      |
| MRL_CHK | m,p-Xylenes              |        | 1      | 0.940     | ug/L  | 94         | (50-150)   |              |      |
| MRLW    | m,p-Xylenes              |        | 0.5    | 0.480     | ug/L  | 96         | (50-150)   |              |      |

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|---------|--------------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| LCS1    | m-Dichlorobenzene (1,3-DCB)    |        | 5      | 5.17      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | m-Dichlorobenzene (1,3-DCB)    |        | 5      | 5.09      | ug/L  | 102      | (70-130)   | 20           | 1.6  |
| MBLK    | m-Dichlorobenzene (1,3-DCB)    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | m-Dichlorobenzene (1,3-DCB)    |        | 0.5    | 0.500     | ug/L  | 100      | (50-150)   |              |      |
| LCS1    | Methyl Tert-butyl ether (MTBE) |        | 5      | 5.04      | ug/L  | 101      | (70-130)   |              |      |
| LCS2    | Methyl Tert-butyl ether (MTBE) |        | 5      | 4.85      | ug/L  | 97       | (70-130)   | 20           | 3.8  |
| MBLK    | Methyl Tert-butyl ether (MTBE) |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Methyl Tert-butyl ether (MTBE) |        | 0.5    | 0.540     | ug/L  | 108      | (50-150)   |              |      |
| LCS1    | Naphthalene                    |        | 5      | 4.62      | ug/L  | 92       | (70-130)   |              |      |
| LCS2    | Naphthalene                    |        | 5      | 4.31      | ug/L  | 86       | (70-130)   | 20           | 6.9  |
| MBLK    | Naphthalene                    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Naphthalene                    |        | 0.5    | 0.420     | ug/L  | 84       | (50-150)   |              |      |
| LCS1    | n-Butylbenzene                 |        | 5      | 4.65      | ug/L  | 93       | (70-130)   |              |      |
| LCS2    | n-Butylbenzene                 |        | 5      | 4.34      | ug/L  | 87       | (70-130)   | 20           | 6.9  |
| MBLK    | n-Butylbenzene                 |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | n-Butylbenzene                 |        | 0.5    | 0.450     | ug/L  | 90       | (50-150)   |              |      |
| LCS1    | n-Propylbenzene                |        | 5      | 5.13      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | n-Propylbenzene                |        | 5      | 5.18      | ug/L  | 104      | (70-130)   | 20           | 0.97 |
| MBLK    | n-Propylbenzene                |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | n-Propylbenzene                |        | 0.5    | 0.480     | ug/L  | 96       | (50-150)   |              |      |
| LCS1    | o-Chlorotoluene                |        | 5      | 5.17      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | o-Chlorotoluene                |        | 5      | 4.84      | ug/L  | 97       | (70-130)   | 20           | 6.6  |
| MBLK    | o-Chlorotoluene                |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | o-Chlorotoluene                |        | 0.5    | 0.500     | ug/L  | 100      | (50-150)   |              |      |
| LCS1    | o-Dichlorobenzene (1,2-DCB)    |        | 5      | 4.87      | ug/L  | 97       | (70-130)   |              |      |
| LCS2    | o-Dichlorobenzene (1,2-DCB)    |        | 5      | 4.60      | ug/L  | 92       | (70-130)   | 20           | 5.7  |
| MBLK    | o-Dichlorobenzene (1,2-DCB)    |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | o-Dichlorobenzene (1,2-DCB)    |        | 0.5    | 0.500     | ug/L  | 100      | (50-150)   |              |      |
| LCS1    | o-Xylene                       |        | 5      | 4.89      | ug/L  | 98       | (70-130)   |              |      |
| LCS2    | o-Xylene                       |        | 5      | 4.85      | ug/L  | 97       | (70-130)   | 20           | 0.82 |
| MBLK    | o-Xylene                       |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | o-Xylene                       |        | 0.5    | 0.450     | ug/L  | 90       | (50-150)   |              |      |
| LCS1    | p-Chlorotoluene                |        | 5      | 5.15      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | p-Chlorotoluene                |        | 5      | 5.05      | ug/L  | 101      | (70-130)   | 20           | 2.0  |
| MBLK    | p-Chlorotoluene                |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | p-Chlorotoluene                |        | 0.5    | 0.490     | ug/L  | 98       | (50-150)   |              |      |
| LCS1    | p-Dichlorobenzene (1,4-DCB)    |        | 5      | 5.14      | ug/L  | 103      | (70-130)   |              |      |
| LCS2    | p-Dichlorobenzene (1,4-DCB)    |        | 5      | 5.00      | ug/L  | 100      | (70-130)   | 20           | 2.8  |

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Honolulu Board of Water Supply

| QC Type | Analyte                     | Native | Spiked | Recovered | Units | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---------|-----------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| MBLK    | p-Dichlorobenzene (1,4-DCB) |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | p-Dichlorobenzene (1,4-DCB) |        | 0.5    | 0.480     | ug/L  | 96       | (50-150)   |              |      |
| LCS1    | p-Isopropyltoluene          |        | 5      | 5.01      | ug/L  | 100      | (70-130)   |              |      |
| LCS2    | p-Isopropyltoluene          |        | 5      | 4.88      | ug/L  | 98       | (70-130)   | 20           | 2.6  |
| MBLK    | p-Isopropyltoluene          |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | p-Isopropyltoluene          |        | 0.5    | 0.430     | ug/L  | 86       | (50-150)   |              |      |
| LCS1    | sec-Butylbenzene            |        | 5      | 5.06      | ug/L  | 101      | (70-130)   |              |      |
| LCS2    | sec-Butylbenzene            |        | 5      | 4.98      | ug/L  | 100      | (70-130)   | 20           | 1.6  |
| MBLK    | sec-Butylbenzene            |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | sec-Butylbenzene            |        | 0.5    | 0.460     | ug/L  | 92       | (50-150)   |              |      |
| LCS1    | Styrene                     |        | 5      | 4.92      | ug/L  | 98       | (70-130)   |              |      |
| LCS2    | Styrene                     |        | 5      | 4.80      | ug/L  | 96       | (70-130)   | 20           | 2.5  |
| MBLK    | Styrene                     |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Styrene                     |        | 0.5    | 0.450     | ug/L  | 90       | (50-150)   |              |      |
| LCS1    | tert-amyl Methyl Ether      |        | 5      | 4.68      | ug/L  | 94       | (70-130)   |              |      |
| LCS2    | tert-amyl Methyl Ether      |        | 5      | 4.55      | ug/L  | 91       | (70-130)   | 20           | 2.8  |
| MBLK    | tert-amyl Methyl Ether      |        |        | <3.0      | ug/L  |          |            |              |      |
| MRL_CHK | tert-amyl Methyl Ether      |        | 0.5    | 0.460     | ug/L  | 92       | (50-150)   |              |      |
| LCS1    | tert-Butyl Ethyl Ether      |        | 5      | 5.30      | ug/L  | 106      | (70-130)   |              |      |
| LCS2    | tert-Butyl Ethyl Ether      |        | 5      | 5.21      | ug/L  | 104      | (70-130)   | 20           | 1.7  |
| MBLK    | tert-Butyl Ethyl Ether      |        |        | <3.0      | ug/L  |          |            |              |      |
| MRL_CHK | tert-Butyl Ethyl Ether      |        | 0.5    | 0.530     | ug/L  | 106      | (50-150)   |              |      |
| LCS1    | tert-Butylbenzene           |        | 5      | 5.05      | ug/L  | 101      | (70-130)   |              |      |
| LCS2    | tert-Butylbenzene           |        | 5      | 4.86      | ug/L  | 97       | (70-130)   | 20           | 3.8  |
| MBLK    | tert-Butylbenzene           |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | tert-Butylbenzene           |        | 0.5    | 0.460     | ug/L  | 92       | (50-150)   |              |      |
| LCS1    | Tetrachloroethylene (PCE)   |        | 5      | 4.93      | ug/L  | 99       | (70-130)   |              |      |
| LCS2    | Tetrachloroethylene (PCE)   |        | 5      | 5.03      | ug/L  | 101      | (70-130)   | 20           | 2.0  |
| MBLK    | Tetrachloroethylene (PCE)   |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Tetrachloroethylene (PCE)   |        | 0.5    | 0.510     | ug/L  | 102      | (50-150)   |              |      |
| LCS1    | Toluene                     |        | 5      | 4.56      | ug/L  | 91       | (70-130)   |              |      |
| LCS2    | Toluene                     |        | 5      | 4.55      | ug/L  | 91       | (70-130)   | 20           | 0.22 |
| MBLK    | Toluene                     |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Toluene                     |        | 0.5    | 0.470     | ug/L  | 94       | (50-150)   |              |      |
| LCS1    | Toluene-d8 (S)              |        | 5      | 98.6      | %     | 99       | (70-130)   |              |      |
| LCS2    | Toluene-d8 (S)              |        | 5      | 100       | %     | 100      | (70-130)   |              |      |
| MBLK    | Toluene-d8 (S)              |        |        | 98.8      | %     | 99       | (70-130)   |              |      |
| MRL_CHK | Toluene-d8 (S)              |        | 5      | 99.8      | %     | 100      | (70-130)   |              |      |

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

Report: 975524  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

| QC Type | Analyte                         | Native | Spiked | Recovered | Units | Yield(%) | Limits (%) | RPD Limit(%) | RPD% |
|---------|---------------------------------|--------|--------|-----------|-------|----------|------------|--------------|------|
| MRLW    | Toluene-d8 (S)                  |        | 5      | 97.6      | %     | 98       | (70-130)   |              |      |
| LCS1    | trans-1,2-Dichloroethylene      |        | 5      | 5.24      | ug/L  | 105      | (70-130)   |              |      |
| LCS2    | trans-1,2-Dichloroethylene      |        | 5      | 4.94      | ug/L  | 99       | (70-130)   | 20           | 5.9  |
| MBLK    | trans-1,2-Dichloroethylene      |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | trans-1,2-Dichloroethylene      |        | 0.5    | 0.520     | ug/L  | 104      | (50-150)   |              |      |
| LCS1    | trans-1,3-Dichloropropene       |        | 5      | 4.44      | ug/L  | 89       | (70-130)   |              |      |
| LCS2    | trans-1,3-Dichloropropene       |        | 5      | 4.27      | ug/L  | 85       | (70-130)   | 20           | 3.9  |
| MBLK    | trans-1,3-Dichloropropene       |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | trans-1,3-Dichloropropene       |        | 0.5    | 0.580     | ug/L  | 116      | (50-150)   |              |      |
| LCS1    | Trichloroethylene (TCE)         |        | 5      | 5.12      | ug/L  | 102      | (70-130)   |              |      |
| LCS2    | Trichloroethylene (TCE)         |        | 5      | 4.97      | ug/L  | 99       | (70-130)   | 20           | 3.0  |
| MBLK    | Trichloroethylene (TCE)         |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Trichloroethylene (TCE)         |        | 0.5    | 0.560     | ug/L  | 112      | (50-150)   |              |      |
| LCS1    | Trichlorofluoromethane          |        | 5      | 5.47      | ug/L  | 109      | (70-130)   |              |      |
| LCS2    | Trichlorofluoromethane          |        | 5      | 5.35      | ug/L  | 107      | (70-130)   | 20           | 2.2  |
| MBLK    | Trichlorofluoromethane          |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Trichlorofluoromethane          |        | 0.5    | 0.560     | ug/L  | 112      | (50-150)   |              |      |
| LCS1    | Trichlorotrifluoroethane(Freon) |        | 5      | 5.39      | ug/L  | 108      | (70-130)   |              |      |
| LCS2    | Trichlorotrifluoroethane(Freon) |        | 5      | 5.27      | ug/L  | 105      | (70-130)   | 20           | 2.3  |
| MBLK    | Trichlorotrifluoroethane(Freon) |        |        | <0.5      | ug/L  |          |            |              |      |
| MRL_CHK | Trichlorotrifluoroethane(Freon) |        | 0.5    | 0.600     | ug/L  | 120      | (50-150)   |              |      |
| LCS1    | Vinyl chloride (VC)             |        | 5      | 6.24      | ug/L  | 125      | (70-130)   |              |      |
| LCS2    | Vinyl chloride (VC)             |        | 5      | 6.02      | ug/L  | 120      | (70-130)   | 20           | 3.6  |
| MBLK    | Vinyl chloride (VC)             |        |        | <0.3      | ug/L  |          |            |              |      |
| MRL_CHK | Vinyl chloride (VC)             |        | 0.5    | 0.580     | ug/L  | 116      | (50-150)   |              |      |
| MRLW    | Vinyl chloride (VC)             |        | 0.25   | 0.310     | ug/L  | 124      | (50-150)   |              |      |

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

Tel: (626) 386-1100  
 Fax: (626) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 975524  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/16/2021 1409

| Analyzed         | Analyte      | Sample ID             | Result | Federal MCL | Units | MRL |
|------------------|--------------|-----------------------|--------|-------------|-------|-----|
| 12/25/2021 00:00 | Benzoic acid | <u>Aiea Well P2</u>   | 1.89   |             | ug/L  | 0.2 |
| 12/25/2021 00:00 | Benzoic acid | <u>Halawa Well P2</u> | 1.64   |             | ug/L  | 0.2 |



3051 Fujita Street  
Torrance, CA 90505  
Tel: (310)-618-8889

Date: 12-30-2021  
EMAX Batch No.: 21L203

Attn: Jackie Contreras

Eurofins Eaton Analytical  
750 Royal Oaks Dr., Suite 100  
Monrovia, CA 91016-3629

Subject: Laboratory Report  
Project: 975524

Enclosed is the Laboratory report for samples received on 12/16/21.  
The data reported relate only to samples listed below :

| Sample ID       | Control # | Col Date | Matrix | Analysis  |
|-----------------|-----------|----------|--------|---|
| 202112160536    | L203-01   | 12/15/21 | WATER  | ETHANOL<br>TPH  |
| 202112160537    | L203-02   | 12/15/21 | WATER  | TPH GASOLINE  |
| 202112160538    | L203-03   | 12/15/21 | WATER  | TPH GASOLINE<br>ETHANOL<br>TPH                        |
| 202112160539    | L203-04   | 12/15/21 | WATER  | TPH GASOLINE  |
| 202112160536MS  | L203-01M  | 12/15/21 | WATER  | TPH GASOLINE<br>ETHANOL<br>TPH GASOLINE<br>TPH DIESEL |
| 202112160536MSD | L203-01S  | 12/15/21 | WATER  | TPH JP-5<br>ETHANOL<br>TPH GASOLINE<br>TPH DIESEL     |
| 202112160538MS  | L203-03M  | 12/15/21 | WATER  | TPH JP-5<br>TPH JP-8                                  |
| 202112160538MSD | L203-03S  | 12/15/21 | WATER  | TPH JP-8  |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

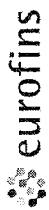
Caspar J. Pang  
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912021-19  
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing  
California ELAP Accredited Certificate Number 2672





Eaton Analytical

Ship To:  
EMAX Laboratories, Inc.  
3051 Fujita St.  
Torrance, CA 90505

Phone: 310-618-8889 Fax: 310-618-0818

Folder #: 975524  
Report Due: 12/21/2021

Sample ID: 202112160536  
Client Sample ID for reference on!  
Alca Well P2

| Method   | Prep Method | Analysis Requested             |
|----------|-------------|--------------------------------|
| SW8015C  |             | Ethanol                        |
| SW 8015B | EPA 5030C   | (SUB)Gas Fraction Hydrocarbons |
| SW 8015B | EPA 3550B   | TPH 8015 Diesel and Motor Oil  |
| EPA 8015 | EPA 8015    | Jet Fuel 5 C8-C18              |
| EPA 8015 |             | Jet Fuel 8 C8-C18              |

Sample ID: 202112160537  
Client Sample ID for reference on!  
TRAVEL BLANK

| Method   | Prep Method | Analysis Requested             |
|----------|-------------|--------------------------------|
| SW 8015B | EPA 5030C   | (SUB)Gas Fraction Hydrocarbons |

Date: 12/16/2021

216203

### Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 975524 Job # 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

Reports: Jackie Contreras Sub-Contracting Administrator  
 EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
 Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
 Phone (626) 386-1165 Fax (626) 386-1122  
 Invoices to: Eurofins Eaton Analytical, LLC  
 Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.  
 Samples from: HAWAII

rush

|              |                    |        |           |       |
|--------------|--------------------|--------|-----------|-------|
| Sample ID    | Sample Date & Time | Matrix | Clip Code | PWSID |
| 202112160536 | 12/15/21 0958      | DW     |           | JLS   |

|              |               |              |                  |            |
|--------------|---------------|--------------|------------------|------------|
| Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID: |
|              |               |              |                  |            |

|              |                    |        |           |       |
|--------------|--------------------|--------|-----------|-------|
| Sample ID    | Sample Date & Time | Matrix | Clip Code | PWSID |
| 202112160537 | 12/15/21 0958      | DW     |           | JLS   |

|              |               |              |                  |            |
|--------------|---------------|--------------|------------------|------------|
| Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID: |
|              |               |              |                  |            |

Relinquished by: *Christy* Sample Control Date 12-16-21 Time 15:16

Received by: *Jackie* Sample Control Date 12-16-21 Time 17:00

Relinquished by: *Jackie* Sample Control Date 12-16-21 Time 19:00

Received by: *Jackie* Sample Control Date 12-16-21 Time 19:00

Temp 16°

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

**Sample ID** 202112160538 **Client Sample ID for reference on!** Halawa Well P2 **Sample Date & Time Matrix** 12/15/21 1117 DW **Clip Code** **PWSID** JLS  
**Sample type:** **Sample Event:** **Facility ID:** **Sample Point ID:** **Static ID:** 21L203

| Method   | Prep Method | Analysis Requested             |
|----------|-------------|--------------------------------|
| SW8015C  |             | Ethanol                        |
| SW 8015B | EPA 5030C   | (SUB)Gas Fraction Hydrocarbons |
| SW 8015B | EPA 3550B   | TPH 8015 Diesel and Motor Oil  |
| EPA 8015 | EPA 8015    | Jet Fuel 5 C8-C18              |
| EPA 8015 |             | Jet Fuel 8 C8-C18              |

**Sample ID** 202112160539 **Client Sample ID for reference on!** TRAVEL BLANK **Sample Date & Time Matrix** 12/15/21 1117 DW **Clip Code** **PWSID** JLS  
**Sample type:** **Sample Event:** **Facility ID:** **Sample Point ID:** **Static ID:**

| Method   | Prep Method | Analysis Requested             |
|----------|-------------|--------------------------------|
| SW 8015B | EPA 5030C   | (SUB)Gas Fraction Hydrocarbons |

**Relinquished by:** *Alan B. Borch* **Sample Control** **Date** 12-16-21 **Time** 1516  
**Received by:** *Adrian* **Sample Control** **Date** 12-16-21 **Time** 1910  
**Relinquished by:** *Adrian* **Sample Control** **Date** 12-16-21 **Time** 1910  
**Received by:** *Adrian* **Sample Control** **Date** 12-16-21 **Time** 1910

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS  
 An Acknowledgement of Receipt is requested to attn: Jackie Contreras

|  |                           |                                       |
|--|---------------------------|---------------------------------------|
| Type of Delivery<br><input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others | Airbill / Tracking Number | ECN <u>21L203</u>                     |
| <input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery  |                           | Recipient <u>Andy</u>                 |
|  |                           | Date <u>12/17/12</u> Time <u>1910</u> |

**COC INSPECTION**

|   |   |   |  |  |  |
|---|---|---|--|--|--|
| <input checked="" type="checkbox"/> Client Name | <input checked="" type="checkbox"/> Client PM/FC      | <input type="checkbox"/> Sampler Name                 | <input checked="" type="checkbox"/> Sampling Date/Time | <input checked="" type="checkbox"/> Sample ID  | <input checked="" type="checkbox"/> Matrix |
| <input checked="" type="checkbox"/> Address     | <input checked="" type="checkbox"/> Tel # / Fax #     | <input checked="" type="checkbox"/> Courier Signature | <input checked="" type="checkbox"/> Analysis Required  | <input type="checkbox"/> Preservative (if any) | <input checked="" type="checkbox"/> TAT    |
| Safety Issues (if any)                          | <input type="checkbox"/> High concentrations expected | <input type="checkbox"/> From Superfund Site          | <input type="checkbox"/> Rad screening required        |  |  |

Note: \_\_\_\_\_

**PACKAGING INSPECTION**

|  |   |   |   |
|--|---|---|---|
| Container                                    | <input checked="" type="checkbox"/> Cooler                | <input type="checkbox"/> Box                | <input type="checkbox"/> Other              |
| Condition                                    | <input checked="" type="checkbox"/> Custody Seal          | <input type="checkbox"/> Intact             | <input type="checkbox"/> Damaged            |
| Packaging                                    | <input checked="" type="checkbox"/> Bubble Pack <u>16</u> | <input type="checkbox"/> Styrofoam          | <input type="checkbox"/> Popcorn            |
| Temperatures (Cool, ≤6 °C but not frozen)    | <input checked="" type="checkbox"/> Cooler 1 <u>5</u> °C  | <input type="checkbox"/> Cooler 2 _____ °C  | <input type="checkbox"/> Cooler 3 _____ °C  |
|  | <input checked="" type="checkbox"/> Cooler 4 <u>14</u> °C | <input type="checkbox"/> Cooler 7 _____ °C  | <input type="checkbox"/> Cooler 8 _____ °C  |
| Thermometer: <u>A - S/N 210191066 a 1/14</u> | <input type="checkbox"/> Cooler 9 _____ °C                | <input type="checkbox"/> Cooler 10 _____ °C | <input type="checkbox"/> Cooler 10 _____ °C |
|  | <u>B - S/N 210271396</u>                                  | <u>C - S/N 210271399</u>                    | <u>D - S/N _____</u>                        |

Comments:  Temperature is out of range. PM was informed IMMEDIATELY.

Note: \_\_\_\_\_

**DISCREPANCIES**

| Lab Sample ID | Lab Sample Container ID | Code       | Client Sample Label ID / Information      | Corrective Action |
|---------------|-------------------------|------------|---|-------------------|
| <u>1-2</u>    | <u>7-1120-25, 1218</u>  | <u>D2</u>  | <u>Label doesn't indicated Jet Fuel 8</u> | <u>R8</u>         |
| <u>1-4</u>    | <u>1-27</u>             | <u>D10</u> |   | <u>↓</u>          |
| <u>3</u>      | <u>23</u>               | <u>D22</u> | <u>Two different dates times</u>          | <u>M</u>          |
| <u>2</u>      | <u>12, 13</u>           | <u>D24</u> | <u>Two different dates</u>                | <u>↓</u>          |
| <u>aditya</u> |                         |            |   |                   |

pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. 12/17/12

NOTES/OBSERVATIONS: Sample 3 container 23 has the incorrect time on label but correct time on sticker, aditya

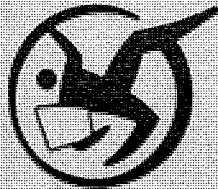
**LEGEND:**

|   |   |   |
|---|---|---|
| <p><b>Code Description-Sample Management</b></p> <p>D1 Analysis is not indicated in _____</p> <p><u>D2</u> Analysis mismatch COC vs label</p> <p>D3 Sample ID mismatch COC vs label</p> <p>D4 Sample ID is not indicated in _____</p> <p>D5 Container -[improper] [leaking] [broken]</p> <p>D6 Date/Time is not indicated in _____</p> <p>D7 Date/Time mismatch COC vs label</p> <p>D8 Sample listed in COC is not received</p> <p>D9 Sample received is not listed in COC</p> <p><u>D10</u> No initial/date on corrections in COC label</p> <p>D11 Container count mismatch COC vs received</p> <p>D12 Container size mismatch COC vs received</p> | <p><b>Code Description-Sample Management</b></p> <p>D13 Out of Holding Time</p> <p>D14 Bubble is &gt;6mm</p> <p>D15 No trip blank in cooler</p> <p>D16 Preservation not indicated in _____</p> <p>D17 Preservation mismatch COC vs label</p> <p>D18 Insufficient chemical preservative</p> <p>D19 Insufficient Sample</p> <p>D20 No filtration info for dissolved analysis</p> <p>D21 No sample for moisture determination</p> <p><u>D22</u> <u>09:58 on original label, 11:17 on second label</u></p> <p>D23 _____</p> <p><u>D24</u> <u>12/9 + 12/15 on labels</u></p> | <p><input type="checkbox"/> Continue to next page.</p> <p><b>Code Description-Sample Management</b></p> <p>R1 Proceed as indicated in <input checked="" type="checkbox"/> COC <input type="checkbox"/> Label</p> <p>R2 Refer to attached instruction</p> <p>R3 Cancel the analysis</p> <p>R4 Use vial with smallest bubble first</p> <p>R5 Log-in with latest sampling date and time+1 min</p> <p>R6 Adjust pH as necessary</p> <p>R7 Filter and preserved as necessary</p> <p>R8 <u>Informed client</u></p> <p>R9 _____</p> <p>R10 _____</p> <p>R11 _____</p> <p>R12 _____</p> |
|---|---|---|

REVIEWS:

Sample Labeling Johanna Ramirez SRF Aditya PM MB

Date 12/17/12 Date 12/17/12 Date 12/17/12



**AREA FAST**  
COURIER SERVICE

1146 N. Central Ave., #444 • Glendale, CA 91202  
Phone: 818/497-4474

INVOICE 18316  
CALL NO \_\_\_\_\_  
REF. NO \_\_\_\_\_  
DATE 12-14-21

CHARGE TO EuroFins  
FROM Entog Andy TO EMAX  
3051 Funita  
PARSONS

| PACKAGES | DESCRIPTION   | CHARGES |
|----------|---------------|---------|
|          | REG. UP       |         |
|          | FLUSH         |         |
|          | A EMP         |         |
|          | MISS. CHARGES |         |
|          | WAITING TIME  |         |
|          | WEIGHT        |         |
|          | TOTAL CHARGE  |         |

DRIVER 110 PICK UP TIME \_\_\_\_\_ DELIVERY TIME 11:00  
Received By: [Signature]

## REPORTING CONVENTIONS

### DATA QUALIFIERS:

| Lab Qualifier | AFCEE Qualifier | Description  |
|---------------|-----------------|--|
| J             | F               | Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.       |
| N             |                 | Indicates presumptive evidence of a compound.  |
| B             | B               | Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level. |
| E             | J               | Indicates that the result is above the maximum calibration range or estimated value.                           |
| *             | *               | Out of QC limit.   |

**Note:** The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

### ACRONYMS AND ABBREVIATIONS:

|      |                                   |
|------|-----------------------------------|
| CRDL | Contract Required Detection Limit |
| RL   | Reporting Limit                   |
| MRL  | Method Reporting Limit            |
| PQL  | Practical Quantitation Limit      |
| MDL  | Method Detection Limit            |
| DO   | Diluted out                       |

### DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

975524

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

SDG#: 21L203

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 975524

SDG : 21L203

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of four(4) water samples were received on 12/16/21 to be analyzed for Total Petroleum Hydrocarbons by Purge And Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39L08B - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. VG39L08L/VG39L08C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG. Matrix spike sample was prepared and analyzed at a frequency required by the project. Gasoline was within MS QC limits in L186-01M/L186-01S. Refer to Matrix QC summary form for details.

Surrogate

Surrogate was added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis

Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : EUROFINS EATON ANALYTICAL  
 Project : 975524  
 SDG NO. : 21L203  
 Instrument ID : GCT039

| Client Sample ID | Laboratory Sample ID | Dilution Factor | % Moist | WATER              |                    | Extraction Date/Time | Sample Data FN | Calibration Data FN | Prep. Batch | Notes                    |
|------------------|----------------------|-----------------|---------|--------------------|--------------------|----------------------|----------------|---------------------|-------------|--------------------------|
|                  |                      |                 |         | Analysis Date/Time | Analysis Date/Time |                      |                |                     |             |                          |
| MBLK1W           | VG39L08B             | 1               | NA      | 12/17/2112:02      | 12/17/2112:02      | 12/17/2112:02        | EL17005A       | EL17003A            | 21VG39L08   | Method Blank             |
| LCS1W            | VG39L08L             | 1               | NA      | 12/17/2112:38      | 12/17/2112:38      | 12/17/2112:38        | EL17006A       | EL17003A            | 21VG39L08   | Lab Control Sample (LCS) |
| LCD1W            | VG39L08C             | 1               | NA      | 12/17/2113:15      | 12/17/2113:15      | 12/17/2113:15        | EL17007A       | EL17003A            | 21VG39L08   | LCS Duplicate            |
| 202112160536     | L203-01              | 1               | NA      | 12/17/2118:08      | 12/17/2118:08      | 12/17/2118:08        | EL17015A       | EL17014A            | 21VG39L08   | Field Sample             |
| 202112160537     | L203-02              | 1               | NA      | 12/17/2118:45      | 12/17/2118:45      | 12/17/2118:45        | EL17016A       | EL17014A            | 21VG39L08   | Field Sample             |
| 202112160538     | L203-03              | 1               | NA      | 12/17/2119:21      | 12/17/2119:21      | 12/17/2119:21        | EL17017A       | EL17014A            | 21VG39L08   | Field Sample             |
| 202112160539     | L203-04              | 1               | NA      | 12/17/2119:57      | 12/17/2119:57      | 12/17/2119:57        | EL17018A       | EL17014A            | 21VG39L08   | Field Sample             |

FN - Filename  
 % Moist - Percent Moisture



# SAMPLE RESULTS

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 09:58
Project     : 975524                     Date Received: 12/16/21
Batch No.   : 21L203                     Date Extracted: 12/17/21 18:08
Sample ID   : 202112160536               Date Analyzed: 12/17/21 18:08
Lab Samp ID: L203-01                     Dilution Factor: 1
Lab File ID: EL17015A                    Matrix: WATER
Ext Btch ID: 21VG39L08                   % Moisture: NA
Calib. Ref.: EL17014A                    Instrument ID: 39
=====

```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |
|----------------------|-------------------|--------------|---------------|----------|
| GASOLINE             | ND                | 0.020        | 0.010         |          |
| SURROGATE PARAMETERS | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |
| Bromofluorobenzene   | 0.0326            | 0.0400       | 82            | 60-140   |

Notes:

Parameter H-C Range  
Gasoline C6-C10  
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.  
Sample Amount : 5ml Final Volume : 5ml  
Prepared by : SCerva Analyzed by : SCerva

METHOD 5030B/8015B  
 TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

```

=====
Client       : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 09:58
Project      : 975524                       Date Received: 12/16/21
Batch No.    : 21L203                       Date Extracted: 12/17/21 18:45
Sample ID    : 202112160537                 Date Analyzed: 12/17/21 18:45
Lab Samp ID  : L203-02                       Dilution Factor: 1
Lab File ID  : EL17016A                      Matrix: WATER
Ext Btch ID  : 21VG39L08                    % Moisture: NA
Calib. Ref.  : EL17014A                     Instrument ID: 39
=====
  
```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |  |
|----------------------|-------------------|--------------|---------------|----------|--|
| GASOLINE             | ND                | 0.020        | 0.010         |          |  |
| SURROGATE PARAMETERS |                   |              |               |          |  |
|                      | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |  |
| Bromofluorobenzene   | 0.0331            | 0.0400       | 83            | 60-140   |  |

Notes:

Parameter        H-C Range  
 Gasoline        C6-C10  
 Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.  
 Sample Amount    : 5ml                              Final Volume : 5ml  
 Prepared by      : SCerva                              Analyzed by : SCerva

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 11:17
Project     : 975524                      Date Received: 12/16/21
Batch No.   : 21L203                      Date Extracted: 12/17/21 19:21
Sample ID   : 202112160538                Date Analyzed: 12/17/21 19:21
Lab Samp ID : L203-03                      Dilution Factor: 1
Lab File ID : EL17017A                    Matrix: WATER
Ext Btch ID: 21VG39L08                    % Moisture: NA
Calib. Ref.: EL17014A                    Instrument ID: 39
=====

```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |  |
|----------------------|-------------------|--------------|---------------|----------|--|
| GASOLINE             | ND                | 0.020        | 0.010         |          |  |
| SURROGATE PARAMETERS | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |  |
| Bromofluorobenzene   | 0.0337            | 0.0400       | 84            | 60-140   |  |

Notes:

Parameter H-C Range  
Gasoline C6-C10  
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.  
Sample Amount : 5ml Final Volume : 5ml  
Prepared by : SCerva Analyzed by : SCerva

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 11:17
Project    : 975524                       Date Received: 12/16/21
Batch No.  : 21L203                       Date Extracted: 12/17/21 19:57
Sample ID  : 202112160539                 Date Analyzed: 12/17/21 19:57
Lab Samp ID: L203-04                      Dilution Factor: 1
Lab File ID: EL17018A                    Matrix: WATER
Ext Btch ID: 21VG39L08                   % Moisture: NA
Calib. Ref.: EL17014A                    Instrument ID: 39
=====

```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |  |
|----------------------|-------------------|--------------|---------------|----------|--|
| GASOLINE             | ND                | 0.020        | 0.010         |          |  |
| SURROGATE PARAMETERS | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |  |
| Bromofluorobenzene   | 0.0335            | 0.0400       | 84            | 60-140   |  |

Notes:

Parameter H-C Range  
Gasoline C6-C10  
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.  
Sample Amount : 5ml Final Volume : 5ml  
Prepared by : SCerva Analyzed by : SCerva

# QC SUMMARIES

METHOD 5030B/8015B  
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/17/21 12:02
Project     : 975524                      Date Received: 12/17/21
Batch No.   : 21L203                      Date Extracted: 12/17/21 12:02
Sample ID   : MBLK1W                      Date Analyzed: 12/17/21 12:02
Lab Samp ID: VG39L08B                    Dilution Factor: 1
Lab File ID: EL17005A                    Matrix: WATER
Ext Btch ID: 21VG39L08                  % Moisture: NA
Calib. Ref.: EL17003A                    Instrument ID: 39
=====

```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |  |
|----------------------|-------------------|--------------|---------------|----------|--|
| GASOLINE             | ND                | 0.020        | 0.010         |          |  |
| SURROGATE PARAMETERS | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |  |
| Bromofluorobenzene   | 0.0349            | 0.0400       | 87            | 60-140   |  |

Notes:

Parameter H-C Range  
Gasoline C6-C10  
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.  
Sample Amount : 5ml Final Volume : 5ml  
Prepared by : SCerva Analyzed by : SCerva

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 5030B/8015B

|                                |                |                |
|--------------------------------|----------------|----------------|
| MATRIX : WATER                 |                | % MOISTURE:NA  |
| DILUTION FACTOR: 1             | 1              | 1              |
| SAMPLE ID : MBLK1W             | LCS1W          | LCD1W          |
| LAB SAMPLE ID : VG39L08B       | VG39L08L       | VG39L08C       |
| LAB FILE ID : EL17005A         | EL17006A       | EL17007A       |
| DATE PREPARED : 12/17/21 12:02 | 12/17/21 12:38 | 12/17/21 13:15 |
| DATE ANALYZED : 12/17/21 12:02 | 12/17/21 12:38 | 12/17/21 13:15 |
| PREP BATCH : 21VG39L08         | 21VG39L08      | 21VG39L08      |
| CALIBRATION REF: EL17003A      | EL17003A       | EL17003A       |

ACCESSION:

| PARAMETERS | MBResult<br>(mg/L) | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | SpikeAmt<br>(mg/L) | LCDResult<br>(mg/L) | LCDRec<br>(%) | RPD<br>(%) | QCLimit<br>(%) | MaxRPD<br>(%) |
|------------|--------------------|--------------------|---------------------|---------------|--------------------|---------------------|---------------|------------|----------------|---------------|
| Gasoline   | ND                 | 0.500              | 0.510               | 102           | 0.500              | 0.472               | 94            | 8          | 60-130         | 30            |

| SURROGATE PARAMETER | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | SpikeAmt<br>(mg/L) | LCDResult<br>(mg/L) | LCDRec<br>(%) | QCLimit<br>(%) |
|---------------------|--------------------|---------------------|---------------|--------------------|---------------------|---------------|----------------|
| Bromofluorobenzene  | 0.0400             | 0.0450              | 113           | 0.0400             | 0.0449              | 112           | 70-130         |

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate



EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975210  
BATCH NO. : 21L186  
METHOD : 5030B/8015B

|                                |                |                 |
|--------------------------------|----------------|-----------------|
| MATRIX : WATER                 |                | % MOISTURE:NA   |
| DILUTION FACTOR: 1             | 1              | 1               |
| SAMPLE ID : 202112150297       | 202112150297MS | 202112150297MSD |
| LAB SAMPLE ID : L186-01        | L186-01M       | L186-01S        |
| LAB FILE ID : EL17008A         | EL17009A       | EL17010A        |
| DATE PREPARED : 12/17/21 13:51 | 12/17/21 14:28 | 12/17/21 15:05  |
| DATE ANALYZED : 12/17/21 13:51 | 12/17/21 14:28 | 12/17/21 15:05  |
| PREP BATCH : 21VG39L08         | 21VG39L08      | 21VG39L08       |
| CALIBRATION REF: EL17003A      | EL17003A       | EL17003A        |

ACCESSION:

| PARAMETERS | PSResult<br>(mg/L) | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | RPD<br>(%) | QCLimit<br>(%) | MaxRPD<br>(%) |
|------------|--------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|------------|----------------|---------------|
| Gasoline   | ND                 | 0.500              | 0.478              | 96           | 0.500              | 0.476               | 95            | 0          | 50-130         | 30            |

| SURROGATE PARAMETER | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | QCLimit<br>(%) |
|---------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|----------------|
| Bromofluorobenzene  | 0.0400             | 0.0424             | 106          | 0.0400             | 0.0426              | 107           | 60-140         |

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

975524

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 21L203

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 975524

SDG : 21L203

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 12/16/21 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSL017WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSL017WL. Refer to LCS summary form for details.

Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 21L203-01M/21L203-01S. Refer to Matrix QC summary form for details.

Surrogate

Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis

Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 975524

SDG : 21L203

METHOD 3520C/8015B  
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 12/16/21 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time  
Samples were analyzed within the prescribed holding time.

Calibration  
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank  
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSL017WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample  
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP5 was within LCS QC limits in J5L017WL. Refer to LCS summary form for details.

Matrix QC Sample  
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 21L203-01M/21L203-01S. Refer to Matrix QC summary form for details.

Surrogate  
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis  
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

## CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 975524

SDG : 21L203

### METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 12/16/21 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

#### Holding Time

Samples were analyzed within the prescribed holding time.

#### Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

#### Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSL017WB - result was compliant to project requirement. Refer to sample result summary form for details.

#### Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP8 was within LCS QC limits in J8L017WL. Refer to LCS summary form for details.

#### Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 21L203-03M/21L203-03S. Refer to Matrix QC summary form for details.

#### Surrogate

Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

#### Sample Analysis

Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

=====  
Client : EUROFINS EATON ANALYTICAL  
Project : 975524  
=====  
SDG NO. : 21L203  
Instrument ID : D5  
=====

| Client<br>Sample ID | Laboratory<br>Sample ID | Dilution<br>Factor | %<br>Moist | Analysis<br>DateTime | Extraction<br>DateTime | Sample<br>Data FN | Calibration |                | Notes                    |
|---------------------|-------------------------|--------------------|------------|----------------------|------------------------|-------------------|-------------|----------------|--------------------------|
|                     |                         |                    |            |                      |                        |                   | Data FN     | Prep.<br>Batch |                          |
|                     |                         |                    |            |                      |                        |                   |             |                |                          |
|                     |                         |                    |            |                      | WATER                  |                   |             |                |                          |
|                     |                         |                    |            |                      |                        |                   |             |                |                          |
|                     |                         |                    |            |                      |                        |                   |             |                |                          |
|                     |                         |                    |            |                      |                        |                   |             |                |                          |
|                     |                         |                    |            |                      |                        |                   |             |                |                          |
| MBLK1W              | DSL017WB                | 1                  | NA         | 12/21/2114:02        | 12/20/2111:00          | LL21009A          | LL21003A    | 21DSL017W      | Method Blank             |
| LCS1W               | DSL017WL                | 1                  | NA         | 12/21/2114:20        | 12/20/2111:00          | LL21010A          | LL21003A    | 21DSL017W      | Lab Control Sample (LCS) |
| 202112160536        | L203-01                 | 1                  | NA         | 12/21/2115:13        | 12/20/2111:00          | LL21013A          | LL21003A    | 21DSL017W      | Field Sample             |
| 202112160536MS      | L203-01M                | 1                  | NA         | 12/21/2115:31        | 12/20/2111:00          | LL21014A          | LL21003A    | 21DSL017W      | Matrix Spike Sample (MS) |
| 202112160536MSD     | L203-01S                | 1                  | NA         | 12/21/2115:48        | 12/20/2111:00          | LL21015A          | LL21003A    | 21DSL017W      | MS Duplicate (MSD)       |
| 202112160538        | L203-03                 | 1                  | NA         | 12/21/2116:42        | 12/20/2111:00          | LL21018A          | LL21003A    | 21DSL017W      | Field Sample             |

FN - Filename  
% Moist - Percent Moisture

LAB CHRONICLE  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client : EUROFINS EATON ANALYTICAL
Project : 975524
=====
Client : EUROFINS EATON ANALYTICAL
Project : 975524
=====
SDG NO. : 21L203
Instrument ID : D5
=====
  
```

| Client Sample ID | Laboratory Sample ID | Dilution Factor | % Moist | WATER              |                      | Extraction Date/Time | Sample Data FN | Calibration Data FN | Prep. Batch | Notes                    |
|------------------|----------------------|-----------------|---------|--------------------|----------------------|----------------------|----------------|---------------------|-------------|--------------------------|
|                  |                      |                 |         | Analysis Date/Time | Extraction Date/Time |                      |                |                     |             |                          |
| MBLK1W           | DSL017WB             | 1               | NA      | 12/21/2114:02      | 12/20/2111:00        | LL21009A             | LL21004A       | 21DSL017W           | 21DSL017W   | Method Blank             |
| LCS1W            | J5L017WL             | 1               | NA      | 12/21/2114:38      | 12/20/2111:00        | LL21011A             | LL21004A       | 21DSL017W           | 21DSL017W   | Lab Control Sample (LCS) |
| 202112160536     | L203-01              | 1               | NA      | 12/21/2115:13      | 12/20/2111:00        | LL21013A             | LL21004A       | 21DSL017W           | 21DSL017W   | Field Sample             |
| 202112160536MS   | L203-01M             | 1               | NA      | 12/21/2116:06      | 12/20/2111:00        | LL21016A             | LL21004A       | 21DSL017W           | 21DSL017W   | Matrix Spike Sample (MS) |
| 202112160536MSD  | L203-01S             | 1               | NA      | 12/21/2116:24      | 12/20/2111:00        | LL21017A             | LL21004A       | 21DSL017W           | 21DSL017W   | MS Duplicate (MSD)       |
| 202112160538     | L203-03              | 1               | NA      | 12/21/2116:42      | 12/20/2111:00        | LL21018A             | LL21004A       | 21DSL017W           | 21DSL017W   | Field Sample             |

FN - Filename  
 % Moist - Percent Moisture

LAB CHRONICLE  
 PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL  
 Project : 975524

SDG NO. : 21L203  
 Instrument ID : D5

| Client Sample ID | Laboratory Sample ID | Dilution Factor | % Moist | Analysis DateTime | Extraction DateTime | Sample Data FN | Calibration Data FN | Prep. Batch | Notes                    |
|------------------|----------------------|-----------------|---------|-------------------|---------------------|----------------|---------------------|-------------|--------------------------|
|                  | WATER                |                 |         |                   |                     |                |                     |             |                          |
| MBLK1W           | DSL017WB             | 1               | NA      | 12/21/2114:02     | 12/20/2111:00       | LL21009A       | LL21005A            | 21DSL017W   | Method Blank             |
| LCS1W            | J8L017WL             | 1               | NA      | 12/21/2114:55     | 12/20/2111:00       | LL21012A       | LL21005A            | 21DSL017W   | Lab Control Sample (LCS) |
| 202112160536     | L203-01              | 1               | NA      | 12/21/2115:13     | 12/20/2111:00       | LL21013A       | LL21005A            | 21DSL017W   | Field Sample             |
| 202112160538     | L203-03              | 1               | NA      | 12/21/2116:42     | 12/20/2111:00       | LL21018A       | LL21005A            | 21DSL017W   | Field Sample             |
| 202112160538MS   | L203-03M             | 1               | NA      | 12/21/2116:59     | 12/20/2111:00       | LL21019A       | LL21005A            | 21DSL017W   | Matrix Spike Sample (MS) |
| 202112160538MSD  | L203-03S             | 1               | NA      | 12/21/2117:17     | 12/20/2111:00       | LL21020A       | LL21005A            | 21DSL017W   | MS Duplicate (MSD)       |

FN - Filename  
 % Moist - Percent Moisture



# SAMPLE RESULTS

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 09:58
Project     : 975524                     Date Received: 12/16/21
Batch No.   : 21L203                     Date Extracted: 12/20/21 11:00
Sample ID   : 202112160536              Date Analyzed: 12/21/21 15:13
Lab Samp ID: 21L203-01                   Dilution Factor: 1
Lab File ID: LL21013A                    Matrix: WATER
Ext Btch ID: 21DSL017W                   % Moisture: NA
Calib. Ref.: LL21003A                    Instrument ID: D5
=====

```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| Diesel     | ND                | 0.025        | 0.012         |
| Motor Oil  | ND                | 0.050        | 0.025         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.461  | 0.500   | 92        | 60-130   |
| Hexacosane           | 0.110  | 0.125   | 88        | 60-130   |

Notes:

Parameter H-C Range  
Diesel C10-C24  
Motor Oil C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
Prepared by : HWang                              Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 09:58
Project     : 975524                     Date Received: 12/16/21
Batch No.   : 21L203                     Date Extracted: 12/20/21 11:00
Sample ID   : 202112160536              Date Analyzed: 12/21/21 15:13
Lab Samp ID: 21L203-01                   Dilution Factor: 1
Lab File ID: LL21013A                     Matrix: WATER
Ext Btch ID: 21DSL017W                    % Moisture: NA
Calib. Ref.: LL21004A                     Instrument ID: D5
=====
    
```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| JP5        | ND                | 0.050        | 0.025         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.461  | 0.500   | 92        | 60-130   |
| Hexacosane           | 0.110  | 0.125   | 88        | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
 Prepared by : HWang                          Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 09:58
Project     : 975524                      Date Received: 12/16/21
Batch No.   : 21L203                      Date Extracted: 12/20/21 11:00
Sample ID   : 202112160536               Date Analyzed: 12/21/21 15:13
Lab Samp ID: 21L203-01                   Dilution Factor: 1
Lab File ID: LL21013A                    Matrix: WATER
Ext Btch ID: 21DSL017W                   % Moisture: NA
Calib. Ref.: LL21005A                    Instrument ID: D5
=====
  
```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| JP8        | ND                | 0.050        | 0.025         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.461  | 0.500   | 92        | 60-130   |
| Hexacosane           | 0.110  | 0.125   | 88        | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP8 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
 Prepared by : HWang                              Analyzed by : SDeeso

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 11:17
Project     : 975524                     Date Received: 12/16/21
Batch No.   : 21L203                     Date Extracted: 12/20/21 11:00
Sample ID   : 202112160538              Date Analyzed: 12/21/21 16:42
Lab Samp ID: 21L203-03                  Dilution Factor: 1
Lab File ID: LL21018A                   Matrix: WATER
Ext Btch ID: 21DSL017W                  % Moisture: NA
Calib. Ref.: LL21003A                   Instrument ID: D5
=====

```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| Diesel     | ND                | 0.024        | 0.012         |
| Motor Oil  | ND                | 0.048        | 0.024         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.435  | 0.480   | 91        | 60-130   |
| Hexacosane           | 0.109  | 0.120   | 90        | 60-130   |

Notes:

Parameter      H-C Range  
Diesel            C10-C24  
Motor Oil        C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount    : 1040ml                      Final Volume : 5ml  
Prepared by        : HWang                              Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 11:17
Project     : 975524                     Date Received: 12/16/21
Batch No.   : 21L203                     Date Extracted: 12/20/21 11:00
Sample ID   : 202112160538              Date Analyzed: 12/21/21 16:42
Lab Samp ID: 21L203-03                   Dilution Factor: 1
Lab File ID: LL21018A                     Matrix: WATER
Ext Btch ID: 21DSL017W                    % Moisture: NA
Calib. Ref.: LL21004A                     Instrument ID: D5
=====
    
```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| JP5        | ND                | 0.048        | 0.024         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.435  | 0.480   | 91        | 60-130   |
| Hexacosane           | 0.109  | 0.120   | 90        | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1040ml                      Final Volume : 5ml  
 Prepared by : HWang                          Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/15/21 11:17
Project    : 975524                       Date Received: 12/16/21
Batch No.  : 21L203                       Date Extracted: 12/20/21 11:00
Sample ID  : 202112160538                Date Analyzed: 12/21/21 16:42
Lab Samp ID: 21L203-03                   Dilution Factor: 1
Lab File ID: LL21018A                     Matrix: WATER
Ext Btch ID: 21DSL017W                   % Moisture: NA
Calib. Ref.: LL21005A                    Instrument ID: D5
=====
  
```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| JP8        | ND                | 0.048        | 0.024         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.435  | 0.480   | 91        | 60-130   |
| Hexacosane           | 0.109  | 0.120   | 90        | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP8 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1040ml                      Final Volume : 5ml  
 Prepared by : HWang                              Analyzed by : SDeeso

# QC SUMMARIES



METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

=====  
Client : EUROFINS EATON ANALYTICAL Date Collected: 12/20/21 11:00  
Project : 975524 Date Received: 12/20/21  
Batch No. : 21L203 Date Extracted: 12/20/21 11:00  
Sample ID : MBLK1W Date Analyzed: 12/21/21 14:02  
Lab Samp ID: DSL017WB Dilution Factor: 1  
Lab File ID: LL21009A Matrix: WATER  
Ext Btch ID: 21DSL017W % Moisture: NA  
Calib. Ref.: LL21003A Instrument ID: D5  
=====

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |  |
|------------|-------------------|--------------|---------------|--|
| Diesel     | ND                | 0.025        | 0.012         |  |
| Motor Oil  | ND                | 0.050        | 0.025         |  |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.406  | 0.500   | 81        | 60-130   |
| Hexacosane           | 0.103  | 0.125   | 82        | 60-130   |

=====

Notes:

Parameter H-C Range  
Diesel C10-C24  
Motor Oil C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml Final Volume : 5ml  
Prepared by : HWang Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSL017WB DSL017WL  
LAB FILE ID : LL21009A LL21010A  
DATE PREPARED : 12/20/21 11:00 12/20/21 11:00  
DATE ANALYZED : 12/21/21 14:02 12/21/21 14:20  
PREP BATCH : 21DSL017W 21DSL017W  
CALIBRATION REF: LL21003A LL21003A

ACCESSION:

| PARAMETERS | MBResult<br>(mg/L) | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|------------|--------------------|--------------------|---------------------|---------------|----------------|
| Diesel     | ND                 | 2.50               | 2.00                | 80            | 50-130         |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|----------------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.500              | 0.373               | 75            | 60-130         |
| Hexacosane           | 0.125              | 0.121               | 97            | 60-130         |

MB: Method Blank sample LCS: Lab Control Sample

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/20/21 11:00
Project     : 975524                      Date Received: 12/20/21
Batch No.   : 21L203                      Date Extracted: 12/20/21 11:00
Sample ID   : MBLK1W                      Date Analyzed: 12/21/21 14:02
Lab Samp ID : DSL017WB                    Dilution Factor: 1
Lab File ID : LL21009A                    Matrix: WATER
Ext Btch ID : 21DSL017W                   % Moisture: NA
Calib. Ref.: LL21004A                    Instrument ID: D5
=====
  
```

| PARAMETERS           | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |          |
|----------------------|-------------------|--------------|---------------|----------|
| JP5                  | ND                | 0.050        | 0.025         |          |
| SURROGATE PARAMETERS | RESULT            | SPK_AMT      | %RECOVERY     | QC LIMIT |
| Bromobenzene         | 0.406             | 0.500        | 81            | 60-130   |
| Hexacosane           | 0.103             | 0.125        | 82            | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
 Prepared by : HWang                         Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSL017WB J5L017WL  
LAB FILE ID : LL21009A LL21011A  
DATE PREPARED : 12/20/21 11:00 12/20/21 11:00  
DATE ANALYZED : 12/21/21 14:02 12/21/21 14:38  
PREP BATCH : 21DSL017W 21DSL017W  
CALIBRATION REF: LL21004A LL21004A

ACCESSION:

| PARAMETERS | MBResult<br>(mg/L) | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|------------|--------------------|--------------------|---------------------|---------------|----------------|
| JP5        | ND                 | 2.50               | 2.10                | 84            | 30-160         |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|----------------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.500              | 0.439               | 88            | 60-130         |
| Hexacosane           | 0.125              | 0.114               | 91            | 60-130         |

MB: Method Blank sample LCS: Lab Control Sample

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/20/21 11:00
Project    : 975524                       Date Received: 12/20/21
Batch No.  : 21L203                       Date Extracted: 12/20/21 11:00
Sample ID  : MBLK1W                       Date Analyzed: 12/21/21 14:02
Lab Samp ID: DSL017WB                     Dilution Factor: 1
Lab File ID: LL21009A                     Matrix: WATER
Ext Btch ID: 21DSL017W                   % Moisture: NA
Calib. Ref.: LL21005A                    Instrument ID: D5
=====
    
```

| PARAMETERS | RESULTS<br>(mg/L) | RL<br>(mg/L) | MDL<br>(mg/L) |
|------------|-------------------|--------------|---------------|
| JP8        | ND                | 0.050        | 0.025         |

| SURROGATE PARAMETERS | RESULT | SPK_AMT | %RECOVERY | QC LIMIT |
|----------------------|--------|---------|-----------|----------|
| Bromobenzene         | 0.406  | 0.500   | 81        | 60-130   |
| Hexacosane           | 0.103  | 0.125   | 82        | 60-130   |

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP8 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
 Prepared by : HWang                          Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSL017WB J8L017WL  
LAB FILE ID : LL21009A LL21012A  
DATE PREPARED : 12/20/21 11:00 12/20/21 11:00  
DATE ANALYZED : 12/21/21 14:02 12/21/21 14:55  
PREP BATCH : 21DSL017W 21DSL017W  
CALIBRATION REF: LL21005A LL21005A

ACCESSION:

| PARAMETERS | MBResult<br>(mg/L) | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|------------|--------------------|--------------------|---------------------|---------------|----------------|
| JP8        | ND                 | 2.50               | 2.32                | 93            | 30-160         |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | LCSResult<br>(mg/L) | LCSRec<br>(%) | QCLimit<br>(%) |
|----------------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.500              | 0.491               | 98            | 60-130         |
| Hexacosane           | 0.125              | 0.109               | 87            | 60-130         |

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

```

=====
MATRIX : WATER % MOISTURE:NA
DILUTION FACTOR: 1 1 1
SAMPLE ID : 202112160536 202112160536MS 202112160536MSD
LAB SAMPLE ID : 21L203-01 21L203-01M 21L203-01S
LAB FILE ID : LL21013A LL21014A LL21015A
DATE PREPARED : 12/20/21 11:00 12/20/21 11:00 12/20/21 11:00
DATE ANALYZED : 12/21/21 15:13 12/21/21 15:31 12/21/21 15:48
PREP BATCH : 21DSL017W 21DSL017W 21DSL017W
CALIBRATION REF: LL21003A LL21003A LL21003A
  
```

ACCESSION:

| PARAMETERS | PSResult<br>(mg/L) | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | RPD<br>(%) | QLLimit<br>(%) | MaxRPD<br>(%) |
|------------|--------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|------------|----------------|---------------|
| Diesel     | ND                 | 2.38               | 2.07               | 87           | 2.33               | 2.07                | 89            | 0          | 50-130         | 30            |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | QLLimit<br>(%) |
|----------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.475              | 0.412              | 87           | 0.465              | 0.352               | 76            | 60-130         |
| Hexacosane           | 0.119              | 0.103              | 87           | 0.116              | 0.106               | 91            | 60-130         |

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                                % MOISTURE:NA
DILUTION FACTOR: 1                                1
SAMPLE ID   : 202112160536                        202112160536MSD
LAB SAMPLE ID : 21L203-01                          21L203-01S
LAB FILE ID  : LL21013A                            LL21017A
DATE PREPARED : 12/20/21 11:00                     12/20/21 11:00
DATE ANALYZED : 12/21/21 15:13                     12/21/21 16:24
PREP BATCH   : 21DSL017W                           21DSL017W
CALIBRATION REF: LL21004A                           LL21004A
  
```

ACCESSION:

| PARAMETERS | PSResult<br>(mg/L) | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | RPD<br>(%) | QCLimit<br>(%) | MaxRPD<br>(%) |
|------------|--------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|------------|----------------|---------------|
| JP5        | ND                 | 2.33               | 1.90               | 82           | 2.35               | 2.13                | 91            | 11         | 30-160         | 30            |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | QCLimit<br>(%) |
|----------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.465              | 0.337              | 72           | 0.470              | 0.455               | 97            | 60-130         |
| Hexacosane           | 0.116              | 0.102              | 88           | 0.118              | 0.103               | 88            | 60-130         |

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate



EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 975524  
BATCH NO. : 21L203  
METHOD : 3520C/8015B

|                  |                  |                |                 |
|------------------|------------------|----------------|-----------------|
| MATRIX           | : WATER          |                | % MOISTURE:NA   |
| DILUTION FACTOR: | 1                | 1              | 1               |
| SAMPLE ID        | : 202112160538   | 202112160538MS | 202112160538MSD |
| LAB SAMPLE ID    | : 21L203-03      | 21L203-03M     | 21L203-03S      |
| LAB FILE ID      | : LL21018A       | LL21019A       | LL21020A        |
| DATE PREPARED    | : 12/20/21 11:00 | 12/20/21 11:00 | 12/20/21 11:00  |
| DATE ANALYZED    | : 12/21/21 16:42 | 12/21/21 16:59 | 12/21/21 17:17  |
| PREP BATCH       | : 21DSL017W      | 21DSL017W      | 21DSL017W       |
| CALIBRATION REF: | LL21005A         | LL21005A       | LL21005A        |

ACCESSION:

| PARAMETERS | PSResult<br>(mg/L) | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | RPD<br>(%) | QCLimit<br>(%) | MaxRPD<br>(%) |
|------------|--------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|------------|----------------|---------------|
| JP8        | ND                 | 2.38               | 2.20               | 93           | 2.45               | 2.19                | 89            | 0          | 30-160         | 30            |

| SURROGATE PARAMETERS | SpikeAmt<br>(mg/L) | MSResult<br>(mg/L) | MSRec<br>(%) | SpikeAmt<br>(mg/L) | MSDResult<br>(mg/L) | MSDRec<br>(%) | QCLimit<br>(%) |
|----------------------|--------------------|--------------------|--------------|--------------------|---------------------|---------------|----------------|
| Bromobenzene         | 0.475              | 0.456              | 96           | 0.490              | 0.546               | 111           | 60-130         |
| Hexacosane           | 0.119              | 0.104              | 88           | 0.123              | 0.109               | 89            | 60-130         |

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

975524

METHOD SW8015C  
ALCOHOLS BY GC

SDG#: 21L203

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 975524

SDG : 21L203

METHOD SW8015C  
ALCOHOLS BY GC

A total of two(2) water samples were received on 12/16/21 to be analyzed for Alcohols by GC in accordance with Method SW8015C and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. MEL007WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. MEL007WL/MEL007WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Ethanol was within MS QC limits in L203-01M/L203-01S. Refer to Matrix QC summary form for details.

Sample Analysis

Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE  
ALCOHOLS BY GC

Client : EUROFINS EATON ANALYTICAL  
Project : 975524  
SDG NO. : 21L203  
Instrument ID : GCT050

| Client Sample ID | Laboratory Sample ID | Dilution Factor | % Moist | Analysis DateTime | Extraction DateTime | Sample Data FN | Calibration Data FN | Prep. Batch | Notes                    |
|------------------|----------------------|-----------------|---------|-------------------|---------------------|----------------|---------------------|-------------|--------------------------|
|                  | MEL007WB             | 1               | NA      | 12/17/2112:36     | NA                  | TL17004A       | TL17002A            | MEL007W     | Method Blank             |
|                  | MEL007WL             | 1               | NA      | 12/17/2112:50     | NA                  | TL17005A       | TL17002A            | MEL007W     | Lab Control Sample (LCS) |
|                  | MEL007WC             | 1               | NA      | 12/17/2113:04     | NA                  | TL17006A       | TL17002A            | MEL007W     | LCS Duplicate            |
| 202112160536     | L203-01              | 1               | NA      | 12/17/2113:41     | NA                  | TL17007A       | TL17002A            | MEL007W     | Field Sample             |
| 202112160536MS   | L203-01M             | 1               | NA      | 12/17/2113:56     | NA                  | TL17008A       | TL17002A            | MEL007W     | Matrix Spike Sample (MS) |
| 202112160536MSD  | L203-01S             | 1               | NA      | 12/17/2114:10     | NA                  | TL17009A       | TL17002A            | MEL007W     | MS Duplicate (MSD)       |
| 202112160538     | L203-03              | 1               | NA      | 12/17/2114:23     | NA                  | TL17010A       | TL17002A            | MEL007W     | Field sample             |

FN - Filename  
% Moist - Percent Moisture

# SAMPLE RESULTS

METHOD SW8015C  
ALCOHOLS BY GC

```
=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: 12/15/21
Project     : 975524                          Date Received: 12/16/21
Batch No.   : 21L203                          Date Extracted: NA
Sample ID   : 202112160536                   Date Analyzed: 12/17/21 13:41
Lab Samp ID: L203-01                          Dilution Factor: 1
Lab File ID: TL17007A                         Matrix          : WATER
Ext Btch ID: MEL007W                          % Moisture     : NA
Calib. Ref.: TL17002A                         Instrument ID  : GCT050
=====
```

| PARAMETERS | RESULTS<br>(ug/L) | RL<br>(ug/L) | MDL<br>(ug/L) |
|------------|-------------------|--------------|---------------|
| ETHANOL    | ND                | 2000         | 500           |

RL : Reporting Limit

METHOD SW8015C  
ALCOHOLS BY GC

```
=====
Client   : EUROFINS EATON ANALYTICAL      Date Collected: 12/15/21
Project  : 975524                          Date Received: 12/16/21
Batch No.: 21L203                          Date Extracted: NA
Sample ID: 202112160538                   Date Analyzed: 12/17/21 14:23
Lab Samp ID: L203-03                       Dilution Factor: 1
Lab File ID: TL17010A                     Matrix          : WATER
Ext Btch ID: MEL007W                       % Moisture     : NA
Calib. Ref.: TL17002A                     Instrument ID  : GCT050
=====
```

| PARAMETERS | RESULTS<br>(ug/L) | RL<br>(ug/L) | MDL<br>(ug/L) |
|------------|-------------------|--------------|---------------|
| -----      | -----             | -----        | -----         |
| ETHANOL    | ND                | 2000         | 500           |

RL : Reporting Limit

# QC SUMMARIES



METHOD SW8015C  
ALCOHOLS BY GC

```
=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: NA
Project     : 975524                        Date Received: NA
Batch No.   : 21L203                        Date Extracted: NA
Sample ID   : MBLK1W                        Date Analyzed: 12/17/21 12:36
Lab Samp ID: MEL007WB                       Dilution Factor: 1
Lab File ID: TL17004A                       Matrix          : WATER
Ext Btch ID: MEL007W                        % Moisture      : NA
Calib. Ref.: TL17002A                       Instrument ID   : GCT050
=====
```

| PARAMETERS | RESULTS<br>(ug/L) | RL<br>(ug/L) | MDL<br>(ug/L) |
|------------|-------------------|--------------|---------------|
| ETHANOL    | ND                | 2000         | 500           |

RL : Reporting Limit

EMAX QUALITY CONTROL DATA  
LCS/LCD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL  
 PROJECT: 975524  
 BATCH NO.: 21L203  
 METHOD: METHOD SW8015C

=====

MATRIX: WATER % MOISTURE: NA  
 DILUTION FACTOR: 1 1 1  
 SAMPLE ID: MBLK1W  
 LAB SAMP ID: MEL007WB MEL007WL MEL007WC  
 LAB FILE ID: TL17004A TL17005A TL17006A  
 DATE EXTRACTED: NA NA NA DATE COLLECTED: NA  
 DATE ANALYZED: 12/17/2112:36 12/17/2112:50 12/17/2113:04 DATE RECEIVED: NA  
 PREP. BATCH: MEL007W MEL007W MEL007W  
 CALIB. REF: TL17002A TL17002A TL17002A

ACCESSION:

| PARAMETER | BLNK RSLT<br>(ug/L) | SPIKE AMT<br>(ug/L) | BS RSLT<br>(ug/L) | BS<br>% REC | SPIKE AMT<br>(ug/L) | BSD RSLT<br>(ug/L) | BSD<br>% REC | RPD<br>( % ) | QC LIMIT<br>( % ) | MAX RPD<br>( % ) |
|-----------|---------------------|---------------------|-------------------|-------------|---------------------|--------------------|--------------|--------------|-------------------|------------------|
| Ethanol   | ND                  | 10000               | 9050              | 91          | 10000               | 9570               | 96           | 6            | 60-130            | 30               |

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL  
PROJECT: 975524  
BATCH NO.: 21L203  
METHOD: METHOD SW8015C

=====

MATRIX: WATER % MOISTURE: NA  
DILUTION FACTOR: 1 1 1  
SAMPLE ID: 202112160536  
LAB SAMP ID: L203-01 L203-01M L203-01S  
LAB FILE ID: TL17007A TL17008A TL17009A  
DATE EXTRACTED: NA NA NA DATE COLLECTED: 12/15/21  
DATE ANALYZED: 12/17/2113:41 12/17/2113:56 12/17/2114:10 DATE RECEIVED: 12/16/21  
PREP. BATCH: MEL007W MEL007W MEL007W  
CALIB. REF: TL17002A TL17002A TL17002A

ACCESSION:

| PARAMETER | SMPL RSLT<br>(ug/L) | SPIKE AMT<br>(ug/L) | MS RSLT<br>(ug/L) | MS<br>% REC | SPIKE AMT<br>(ug/L) | MSD RSLT<br>(ug/L) | MSD<br>% REC | RPD<br>( % ) | QC LIMIT<br>( % ) | MAX RPD<br>( % ) |
|-----------|---------------------|---------------------|-------------------|-------------|---------------------|--------------------|--------------|--------------|-------------------|------------------|
| Ethanol   | ND                  | 10000               | 9700              | 97          | 10000               | 9610               | 96           | 1            | 60-130            | 30               |

December 28, 2021

Debbie Frank  
 Eurofins Eaton Analytical  
 750 Royal Oaks Drive  
 Suite 100  
 Monrovia, CA 91016-

Project Name: Folder # 975524 Job # 1000014  
 Physis Project ID: 1407003-206

Dear Debbie,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 12/16/2021. A total of 2 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

| Organics  |
|---|
| Polynuclear Aromatic Hydrocarbons by EPA 625.1  |
| Disalicylidenepropanediamine by EPA 625.1       |
| Dibenzo [a,l] Pyrene w/ PAHs by EPA 625.1       |
| Base/Neutral Extractable Compounds by EPA 625.1 |
| Acid Extractable Compounds w/ PAHs by EPA 625.1 |
| 6-tert-Butyl-2,4-dimethylphenol by EPA 625.1    |
| 2,6-Di-tert-butylphenol by EPA 625.1            |
| 2,6-Di-tert-butyl-4-methylphenol by EPA 625.1   |
| p-tert-Butylphenol by EPA 625.1                 |

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Rachel Hansen  
 714 602-5320  
 Extension 203  
 rachelhansen@physislabs.com

## PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-206

Folder # 975524 Job # 1000014

Total Samples: 2

| PHYSIS ID | Sample ID    | Description    | Date       | Time  | Matrix      | Sample Type   |
|-----------|--------------|----------------|------------|-------|-------------|---------------|
| 94652     | 202112160536 | Aiea Well P2   | 12/15/2021 | 9:58  | Samplewater | Not Specified |
| 94653     | 202112160538 | Halawa Well P2 | 12/15/2021 | 11:17 | Samplewater | Not Specified |

## ABBREVIATIONS and ACRONYMS

|      |  |
|------|--|
| QM   | Quality Manual                         |
| QA   | Quality Assurance                      |
| QC   | Quality Control                        |
| MDL  | method detection limit                 |
| RL   | reporting limit                        |
| R1   | project sample                         |
| R2   | project sample replicate               |
| MS1  | matrix spike                           |
| MS2  | matrix spike replicate                 |
| B1   | procedural blank                       |
| B2   | procedural blank replicate             |
| BS1  | blank spike                            |
| BS2  | blank spike replicate                  |
| LCS1 | laboratory control spike               |
| LCS2 | laboratory control spike replicate     |
| LCM1 | laboratory control material            |
| LCM2 | laboratory control material replicate  |
| CRM1 | certified reference material           |
| CRM2 | certified reference material replicate |
| RPD  | relative percent difference            |
| LMW  | low molecular weight                   |
| HMW  | high molecular weight                  |

## QUALITY ASSURANCE SUMMARY

**LABORATORY BATCH:** Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

**PROCEDURAL BLANK:** Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

**ACCURACY:** Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

**PRECISION:** Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS<sub>1</sub>/MS<sub>2</sub>, BS<sub>1</sub>/BS<sub>2</sub>, LCS<sub>1</sub>/LCS<sub>2</sub>, LCM<sub>1</sub>/LCM<sub>2</sub>, CRM<sub>1</sub>/CRM<sub>2</sub>, surrogate spikes and/or replicate project sample analysis (R<sub>1</sub>/R<sub>2</sub>) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

**BLANK SPIKES:** BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

**MATRIX SPIKES:** MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

**CERTIFIED REFERENCE MATERIALS:** CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

**LABORATORY CONTROL MATERIAL:** LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

**LABORATORY CONTROL SPIKES:** LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

**SURROGATES:** A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

**HOLDING TIME:** Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

**SAMPLE STORAGE/RETENTION:** In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

**TOTAL/DISSOLVED FRACTION:** In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.



## PHYSIS QUALIFIER CODES

| CODE | DEFINITION  |
|------|---|
| #    | see Case Narrative  |
| ND   | analyte not detected at or above the MDL  |
| B    | analyte was detected in the procedural blank greater than 10 times the MD   |
| E    | analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated  |
| H    | sample received and/or analyzed past the recommended holding time   |
| J    | analyte was detected at a concentration below the RL and above the MDL, reported value is estimated   |
| N    | insufficient sample, analysis could not be performed  |
| M    | analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification  |
| SH   | analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply  |
| SL   | analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply  |
| NH   | project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply  |
| Q    | analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification  |
| R    | Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples |

# ANALYTICAL REPORT

TERRA  
ENVIRONMENTAL LABORATORIES, INC.

*Innovative Solutions for Nature*

## Acid Extractable Compounds

| ANALYTE  | Method    | Units      | RESULT | DF | MDL  | RL  | Fraction | QA CODE | Batch ID  | Date Processed | Date Analyzed       |
|--|-----------|------------|--------|----|------|-----|----------|---------|-----------|----------------|---------------------|
| <b>Sample ID: 94652-R1 202112160536 Aiea Well P2 Matrix: Samplewater</b> |           |            |        |    |      |     |          |         |           |                |                     |
| (2,4,6-Tribromophenol)   | EPA 625.1 | % Recovery | 58     | 1  |      |     | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| (d5-Phenol)  | EPA 625.1 | % Recovery | 26     | 1  |      |     | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,4,5-Trichlorophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,4,6-Trichlorophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,4-Dichlorophenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,4-Dinitrophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,6-Dichlorophenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,6-Di-tert-butyl-4-methylphenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2,6-Di-tert-butylphenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2-Chlorophenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2-Methyl-4,6-dinitrophenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2-Methylphenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 2-Nitrophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 3+4-Methylphenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 4-Chloro-3-methylphenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 4-Nitrophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| 6-tert-butyl-2,4-dimethylphenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| Benzoic Acid   | EPA 625.1 | µg/L       | 1.89   | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| Benzyl Alcohol   | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| Pentachlorophenol  | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| Phenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |
| p-tert-Butylphenol   | EPA 625.1 | µg/L       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 | 15-Dec-21 | 9:58           | Received: 22-Dec-21 |

## Acid Extractable Compounds

| ANALYTE                          | Method                             | Units                      | RESULT | DF | MDL  | RL  | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed       |
|----------------------------------|------------------------------------|----------------------------|--------|----|------|-----|----------|---------|----------|----------------|---------------------|
| <b>Sample ID: 94653-R1</b>       | <b>202112160538 Halawa Well P2</b> | <b>Matrix: Samplewater</b> |        |    |      |     |          |         |          |                |                     |
| (2,4,6-Tribromophenol)           | EPA 625.1                          | % Recovery                 | 66     | 1  |      |     | Total    | O-35024 | 11:17    | 15-Dec-21      | Received: 22-Dec-21 |
| (d5-Phenol)                      | EPA 625.1                          | % Recovery                 | 27     | 1  |      |     | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,4,5-Trichlorophenol            | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,4,6-Trichlorophenol            | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,4-Dichlorophenol               | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,4-Dinitrophenol                | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,6-Dichlorophenol               | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,6-Di-tert-butyl-4-methylphenol | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2,6-Di-tert-butylphenol          | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2-Chlorophenol                   | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2-Methyl-4,6-dinitrophenol       | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2-Methylphenol                   | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 2-Nitrophenol                    | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 3+4-Methylphenol                 | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 4-Chloro-3-methylphenol          | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 4-Nitrophenol                    | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| 6-tert-butyl-2,4-dimethylphenol  | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| Benzoic Acid                     | EPA 625.1                          | µg/L                       | 1.64   | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| Benzyl Alcohol                   | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| Pentachlorophenol                | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |
| Phenol                           | EPA 625.1                          | µg/L                       | ND     | 1  | 0.1  | 0.2 | Total    | O-35024 |          |                | 22-Dec-21           |
| p-tert-Butylphenol               | EPA 625.1                          | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    | O-35024 |          |                | 22-Dec-21           |

## Base/Neutral Extractable Compounds

| ANALYTE                      | Method                           | Units                      | RESULT | DF | MDL  | RL  | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed       |           |
|------------------------------|----------------------------------|----------------------------|--------|----|------|-----|----------|---------|----------|----------------|---------------------|-----------|
| <b>Sample ID: 94652-R1</b>   | <b>202112160536 Aiea Well P2</b> | <b>Matrix: Samplewater</b> |        |    |      |     |          |         |          |                |                     |           |
| (d4-1,4-Dichlorobenzene)     | EPA 625.1                        | % Recovery                 | 56     | 1  |      |     | Total    |         | O-35024  | 15-Dec-21 9:58 | Received: 22-Dec-21 | 16-Dec-21 |
| 2-Chloronaphthalene          | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 2-Nitroaniline               | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 3-Nitroaniline               | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 4-Bromophenylphenyl ether    | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 4-Chloroaniline              | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 4-Chlorophenylphenyl ether   | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| 4-Nitroaniline               | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Aniline                      | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Benzidine                    | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Bis(2-Chloroethoxy) methane  | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Bis(2-Chloroethyl) ether     | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Bis(2-Chloroisopropyl) ether | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Dibenzofuran                 | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Disalicylidenepropanediamine | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Hexachloroethane             | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| Nitrobenzene                 | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| N-Nitrosodi-n-propylamine    | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |
| N-Nitrosodiphenylamine       | EPA 625.1                        | µg/L                       | ND     | 1  | 0.05 | 0.1 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21           |           |

## Base/Neutral Extractable Compounds

| ANALYTE                      | Method                             | Units                      | RESULT                          | DF                         | MDL  | RL  | Fraction | QA CODE | Batch ID  | Date Processed | Date Analyzed |  |
|------------------------------|------------------------------------|----------------------------|---------------------------------|----------------------------|------|-----|----------|---------|-----------|----------------|---------------|--|
| <b>Sample ID: 94653-R1</b>   | <b>202112160538 Halawa Well P2</b> | <b>Matrix: Samplewater</b> | <b>Sampled: 15-Dec-21 11:17</b> | <b>Received: 16-Dec-21</b> |      |     |          |         |           |                |               |  |
| (d4-1,4-Dichlorobenzene)     | EPA 625.1                          | % Recovery                 | 61                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 2-Chloronaphthalene          | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 2-Nitroaniline               | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 3-Nitroaniline               | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 4-Bromophenylphenyl ether    | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 4-Chloroaniline              | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 4-Chlorophenylphenyl ether   | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| 4-Nitroaniline               | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Aniline                      | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Benzidine                    | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Bis(2-Chloroethoxy) methane  | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Bis(2-Chloroethyl) ether     | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Bis(2-Chloroisopropyl) ether | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Dibenzofuran                 | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Disalicylidenepropanediamine | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Hexachloroethane             | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| Nitrobenzene                 | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| N-Nitrosodi-n-propylamine    | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |
| N-Nitrosodiphenylamine       | EPA 625.1                          | µg/L                       | ND                              | 1                          | 0.05 | 0.1 | Total    | O-35024 | 22-Dec-21 | 25-Dec-21      |               |  |

PHYSIS Project ID: 1407003-206  
Client: Eurofins Eaton Analytical  
Project: Folder # 975524 Job # 1000014

## Polynuclear Aromatic Hydrocarbons

| ANALYTE                        | Method                           | Units                      | RESULT | DF | MDL   | RL    | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed |  |
|--------------------------------|----------------------------------|----------------------------|--------|----|-------|-------|----------|---------|----------|----------------|---------------|--|
| <b>Sample ID: 94652-R1</b>     | <b>202112160536 Aiea Well P2</b> | <b>Matrix: Samplewater</b> |        |    |       |       |          |         |          |                |               |  |
| (d10-Acenaphthene)             | EPA 625.1                        | % Recovery                 | 79     | 1  |       |       | Total    |         | O-35024  | 15-Dec-21 9:58 | 22-Dec-21     |  |
| (d10-Phenanthrene)             | EPA 625.1                        | % Recovery                 | 88     | 1  |       |       | Total    |         | O-35024  |                | 25-Dec-21     |  |
| (d12-Chrysene)                 | EPA 625.1                        | % Recovery                 | 92     | 1  |       |       | Total    |         | O-35024  |                | 25-Dec-21     |  |
| (d12-Perylene)                 | EPA 625.1                        | % Recovery                 | 91     | 1  |       |       | Total    |         | O-35024  |                | 25-Dec-21     |  |
| (d8-Naphthalene)               | EPA 625.1                        | % Recovery                 | 68     | 1  |       |       | Total    |         | O-35024  |                | 25-Dec-21     |  |
| 1-Methylnaphthalene            | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| 1-Methylphenanthrene           | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| 2,3,5-Trimethylnaphthalene     | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| 2,6-Dimethylnaphthalene        | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| 2-Methylnaphthalene            | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Acenaphthene                   | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Acenaphthylene                 | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Anthracene                     | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>a</i> ]anthracene     | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>a</i> ]pyrene         | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>b</i> ]fluoranthene   | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>e</i> ]pyrene         | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>g,h,i</i> ]perylene   | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Benz[ <i>k</i> ]fluoranthene   | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Biphenyl                       | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Chrysene                       | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Dibenz[ <i>a,h</i> ]anthracene | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Dibenz[ <i>a,l</i> ]pyrene     | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |
| Dibenzothiophene               | EPA 625.1                        | µg/L                       | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  |                | 25-Dec-21     |  |

## Polynuclear Aromatic Hydrocarbons

| ANALYTE                | Method    | Units | RESULT | DF | MDL   | RL    | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed |
|------------------------|-----------|-------|--------|----|-------|-------|----------|---------|----------|----------------|---------------|
| Fluoranthene           | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Fluorene               | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Indeno[1,2,3-cd]pyrene | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Naphthalene            | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Perylene               | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Phenanthrene           | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Pyrene                 | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |



## Polynuclear Aromatic Hydrocarbons

| ANALYTE  | Method    | Units      | RESULT | DF | MDL   | RL    | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed       |
|--|-----------|------------|--------|----|-------|-------|----------|---------|----------|----------------|---------------------|
| <b>Sample ID: 94653-R1 202112160538 Halawa Well P2 Matrix: Samplewater</b> |           |            |        |    |       |       |          |         |          |                |                     |
| (d10-Acenaphthene)   | EPA 625.1 | % Recovery | 91     | 1  |       |       | Total    | O-35024 | 11:17    | 15-Dec-21      | Received: 22-Dec-21 |
| (d10-Phenanthrene)   | EPA 625.1 | % Recovery | 95     | 1  |       |       | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| (d12-Chrysene)   | EPA 625.1 | % Recovery | 80     | 1  |       |       | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| (d12-Perylene)   | EPA 625.1 | % Recovery | 96     | 1  |       |       | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| (d8-Naphthalene)   | EPA 625.1 | % Recovery | 81     | 1  |       |       | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| 1-Methylnaphthalene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| 1-Methylphenanthrene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| 2,3,5-Trimethylnaphthalene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| 2,6-Dimethylnaphthalene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| 2-Methylnaphthalene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Acenaphthene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Acenaphthylene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Anthracene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[a]anthracene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[a]pyrene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[b]fluoranthene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[e]pyrene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[g,h,i]perylene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Benz[k]fluoranthene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Biphenyl   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Chrysene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Dibenz[a,h]anthracene  | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Dibenzo[a,l]pyrene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |
| Dibenzothiophene   | EPA 625.1 | µg/L       | ND     | 1  | 0.001 | 0.005 | Total    | O-35024 |          | 22-Dec-21      | 25-Dec-21           |

## Polynuclear Aromatic Hydrocarbons

| ANALYTE                | Method    | Units | RESULT | DF | MDL   | RL    | Fraction | QA CODE | Batch ID | Date Processed | Date Analyzed |
|------------------------|-----------|-------|--------|----|-------|-------|----------|---------|----------|----------------|---------------|
| Fluoranthene           | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Fluorene               | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Indeno[1,2,3-cd]pyrene | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Naphthalene            | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Perylene               | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Phenanthrene           | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |
| Pyrene                 | EPA 625.1 | µg/L  | ND     | 1  | 0.001 | 0.005 | Total    |         | O-35024  | 22-Dec-21      | 25-Dec-21     |

# QUALITY CONTROL REPORT

TERRA

AURA

ENVIRONMENTAL LABORATORIES, INC.

*Innovative Solutions for Nature*

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

| ANALYTE  | FRACTION | RESULT | DF | MDL  | RL  | UNITS      | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |
|--|----------|--------|----|------|-----|------------|-------------|---------------|-----------------|-------------|----------|
| <b>Sample ID: 94651-B1 QAQC Procedural Blank</b> |          |        |    |      |     |            |             |               |                 |             |          |
| Method: EPA 625.1                                |          |        |    |      |     |            |             |               |                 |             |          |
| Batch ID: O-35024                                |          |        |    |      |     |            |             |               |                 |             |          |
| Prepared: 22-Dec-21                              |          |        |    |      |     |            |             |               |                 |             |          |
| Analyzed: 25-Dec-21                              |          |        |    |      |     |            |             |               |                 |             |          |
| (2,4,6-Tribromophenol)                           | Total    | 59     | 1  |      |     | % Recovery | 100         | 59            | 44 - 159%       | PASS        |          |
| (d5-Phenol)                                      | Total    | 87     | 1  |      |     | % Recovery | 100         | 87            | 20 - 121%       | PASS        |          |
| 2,4,5-Trichlorophenol                            | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2,4,6-Trichlorophenol                            | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2,4-Dichlorophenol                               | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2,4-Dinitrophenol                                | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 2,6-Dichlorophenol                               | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2,6-Di-tert-butyl-4-methylphenol                 | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2,6-Di-tert-butylphenol                          | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2-Chlorophenol                                   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| 2-Methyl-4,6-dinitrophenol                       | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 2-Methylphenol                                   | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 2-Nitrophenol                                    | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 3+4-Methylphenol                                 | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 4-Chloro-3-methylphenol                          | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 4-Nitrophenol                                    | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| 6-tert-butyl-2,4-dimethylphenol                  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| Benzoic Acid                                     | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| Benzyl Alcohol                                   | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| Pentachlorophenol                                | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |
| Phenol   | Total    | ND     | 1  | 0.1  | 0.2 | µg/L       |             |               |                 |             |          |
| p-tert-Butylphenol                               | Total    | ND     | 1  | 0.05 | 0.1 | µg/L       |             |               |                 |             |          |

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

| ANALYTE                          | FRACTION | RESULT            | DF | MDL               | RL  | UNITS               | SPIKE LEVEL | SOURCE RESULT       | ACCURACY LIMITS | PRECISION % | QA CODEC |
|----------------------------------|----------|-------------------|----|-------------------|-----|---------------------|-------------|---------------------|-----------------|-------------|----------|
| Sample ID: 94651-BS1             |          |                   |    |                   |     |                     |             |                     |                 |             |          |
| Matrix: BlankMatrix              |          |                   |    |                   |     |                     |             |                     |                 |             |          |
| QAQC Procedural Blank            |          |                   |    |                   |     |                     |             |                     |                 |             |          |
|                                  |          | Method: EPA 625.1 |    | Batch ID: O-35024 |     | Prepared: 22-Dec-21 |             | Analyzed: 25-Dec-21 |                 |             |          |
| (2,4,6-Tribromophenol)           | Total    | 61                | 1  |                   |     | % Recovery          | 100         | 0                   | 61              | 44 - 159%   | PASS     |
| (d5-Phenol)                      | Total    | 71                | 1  |                   |     | % Recovery          | 100         | 0                   | 71              | 20 - 121%   | PASS     |
| 2,4,5-Trichlorophenol            | Total    | 0.917             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 92              | 57 - 116%   | PASS     |
| 2,4,6-Trichlorophenol            | Total    | 0.982             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 98              | 56 - 118%   | PASS     |
| 2,4-Dichlorophenol               | Total    | 0.855             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 86              | 51 - 117%   | PASS     |
| 2,4-Dinitrophenol                | Total    | 0.847             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 85              | 0 - 152%    | PASS     |
| 2,6-Dichlorophenol               | Total    | 0.443             | 1  | 0.05              | 0.1 | µg/L                | 0.5         | 0                   | 89              | 30 - 130%   | PASS     |
| 2,6-Di-tert-butyl-4-methylphenol | Total    | 0.784             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 78              | 50 - 150%   | PASS     |
| 2,6-Di-tert-butylphenol          | Total    | 0.848             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 85              | 50 - 150%   | PASS     |
| 2-Chlorophenol                   | Total    | 0.781             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 78              | 41 - 110%   | PASS     |
| 2-Methyl-4,6-dinitrophenol       | Total    | 0.958             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 96              | 0 - 141%    | PASS     |
| 2-Methylphenol                   | Total    | 0.855             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 86              | 40 - 117%   | PASS     |
| 2-Nitrophenol                    | Total    | 1.01              | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 101             | 40 - 117%   | PASS     |
| 3+4-Methylphenol                 | Total    | 0.84              | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 84              | 0 - 130%    | PASS     |
| 4-Chloro-3-methylphenol          | Total    | 0.893             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 89              | 51 - 128%   | PASS     |
| 4-Nitrophenol                    | Total    | 0.906             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 91              | 10 - 164%   | PASS     |
| 6-tert-butyl-2,4-dimethylphenol  | Total    | 0.956             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 96              | 50 - 150%   | PASS     |
| Benzoic Acid                     | Total    | 0.728             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 73              | 2 - 145%    | PASS     |
| Benzyl Alcohol                   | Total    | 0.85              | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 85              | 43 - 148%   | PASS     |
| Pentachlorophenol                | Total    | 1.03              | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 103             | 36 - 111%   | PASS     |
| Phenol                           | Total    | 0.763             | 1  | 0.1               | 0.2 | µg/L                | 1           | 0                   | 76              | 29 - 114%   | PASS     |
| p-tert-Butylphenol               | Total    | 0.96              | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 96              | 50 - 150%   | PASS     |

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

| ANALYTE                          | FRACTION | RESULT | DF | MDL  | RL  | UNITS      | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |    |    |      |
|----------------------------------|----------|--------|----|------|-----|------------|-------------|---------------|-----------------|-------------|----------|----|----|------|
| Matrix: BlankMatrix              |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Sample ID: 94651-BS2             |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| QAQC Procedural Blank            |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Method: EPA 625.1                |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Batch ID: O-35024                |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Prepared: 22-Dec-21              |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Analyzed: 25-Dec-21              |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| (2,4,6-Tribromophenol)           | Total    | 61     | 1  |      |     | % Recovery | 100         | 0             | 61              | 44 - 159%   | PASS     | 0  | 30 | PASS |
| (d5-Phenol)                      | Total    | 70     | 1  |      |     | % Recovery | 100         | 0             | 70              | 20 - 121%   | PASS     | 1  | 30 | PASS |
| 2,4,5-Trichlorophenol            | Total    | 0.925  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 93              | 57 - 116%   | PASS     | 0  | 30 | PASS |
| 2,4,6-Trichlorophenol            | Total    | 0.973  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 97              | 56 - 118%   | PASS     | 1  | 30 | PASS |
| 2,4-Dichlorophenol               | Total    | 0.844  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 84              | 51 - 117%   | PASS     | 2  | 30 | PASS |
| 2,4-Dinitrophenol                | Total    | 0.783  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 78              | 0 - 152%    | PASS     | 9  | 30 | PASS |
| 2,6-Dichlorophenol               | Total    | 0.444  | 1  | 0.05 | 0.1 | µg/L       | 0.5         | 0             | 89              | 30 - 130%   | PASS     | 0  | 30 | PASS |
| 2,6-Di-tert-butyl-4-methylphenol | Total    | 0.701  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 70              | 50 - 150%   | PASS     | 11 | 30 | PASS |
| 2,6-Di-tert-butylphenol          | Total    | 0.812  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 81              | 50 - 150%   | PASS     | 5  | 30 | PASS |
| 2-Chlorophenol                   | Total    | 0.792  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 79              | 41 - 110%   | PASS     | 1  | 30 | PASS |
| 2-Methyl-4,6-dinitrophenol       | Total    | 0.99   | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 99              | 0 - 141%    | PASS     | 3  | 30 | PASS |
| 2-Methylphenol                   | Total    | 0.842  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 84              | 40 - 117%   | PASS     | 2  | 30 | PASS |
| 2-Nitrophenol                    | Total    | 0.987  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 99              | 40 - 117%   | PASS     | 2  | 30 | PASS |
| 3+4-Methylphenol                 | Total    | 0.845  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 85              | 0 - 130%    | PASS     | 0  | 30 | PASS |
| 4-Chloro-3-methylphenol          | Total    | 0.88   | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 88              | 51 - 128%   | PASS     | 1  | 30 | PASS |
| 4-Nitrophenol                    | Total    | 0.924  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 92              | 10 - 164%   | PASS     | 1  | 30 | PASS |
| 6-tert-butyl-2,4-dimethylphenol  | Total    | 0.929  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 93              | 50 - 150%   | PASS     | 3  | 30 | PASS |
| Benzoic Acid                     | Total    | 0.921  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 92              | 2 - 145%    | PASS     | 23 | 30 | PASS |
| Benzyl Alcohol                   | Total    | 0.866  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 87              | 43 - 148%   | PASS     | 2  | 30 | PASS |
| Pentachlorophenol                | Total    | 1.01   | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 101             | 36 - 111%   | PASS     | 2  | 30 | PASS |
| Phenol                           | Total    | 0.755  | 1  | 0.1  | 0.2 | µg/L       | 1           | 0             | 75              | 29 - 114%   | PASS     | 0  | 30 | PASS |
| p-tert-Butylphenol               | Total    | 0.937  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 94              | 50 - 150%   | PASS     | 2  | 30 | PASS |

## Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

| ANALYTE  | FRACTION | RESULT | DF | MDL  | RL  | UNITS | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |
|--|----------|--------|----|------|-----|-------|-------------|---------------|-----------------|-------------|----------|
| Sample ID: 94651-B1    QAQC Procedural Blank    Matrix: BlankMatrix    Sampled:    Received: |          |        |    |      |     |       |             |               |                 |             |          |
| Method: EPA 625.1    Batch ID: O-35024    Prepared: 22-Dec-21    Analyzed: 25-Dec-21         |          |        |    |      |     |       |             |               |                 |             |          |
| (d4-1,4-Dichlorobenzene)   | Total    | 85     | 1  |      |     |       | % Recovery  | 100           | 85              | 30 - 130%   | PASS     |
| 2-Chloronaphthalene  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 2-Nitroaniline   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 3-Nitroaniline   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 4-Bromophenyl ether  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 4-Chloroaniline  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 4-Chlorophenyl ether   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| 4-Nitroaniline   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Aniline  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Benzidine  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Bis(2-Chloroethoxy) methane  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Bis(2-Chloroethyl) ether   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Bis(2-Chloroisopropyl) ether   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Dibenzofuran   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Disalicylidenepropanediamine   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Hexachloroethane   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| Nitrobenzene   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| N-Nitrosodi-n-propylamine  | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |
| N-Nitrosodiphenylamine   | Total    | ND     | 1  | 0.05 | 0.1 | µg/L  |             |               |                 |             |          |

## Base/Neutral Extractable Compounds **QUALITY CONTROL REPORT**

| ANALYTE                      | FRACTION | RESULT            | DF | MDL               | RL  | UNITS               | SPIKE LEVEL | SOURCE RESULT       | ACCURACY LIMITS | PRECISION % | QA CODEC |
|------------------------------|----------|-------------------|----|-------------------|-----|---------------------|-------------|---------------------|-----------------|-------------|----------|
| Sample ID: 94651-BS1         |          |                   |    |                   |     |                     |             |                     |                 |             |          |
| Matrix: BlankMatrix          |          |                   |    |                   |     |                     |             |                     |                 |             |          |
| QAQC Procedural Blank        |          |                   |    |                   |     |                     |             |                     |                 |             |          |
|                              |          | Method: EPA 625.1 |    | Batch ID: O-35024 |     | Prepared: 22-Dec-21 |             | Analyzed: 25-Dec-21 |                 |             |          |
|                              |          | Total             | 76 | 1                 |     | % Recovery          | 100         | 0                   | 76              | 30 - 130%   | PASS     |
| (d4-1,4-Dichlorobenzene)     | Total    | 0.919             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 92              | 53 - 130%   | PASS     |
| 2-Chloronaphthalene          | Total    | 0.9               | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 90              | 69 - 114%   | PASS     |
| 2-Nitroaniline               | Total    | 0.565             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 56              | 23 - 137%   | PASS     |
| 3-Nitroaniline               | Total    | 0.999             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 100             | 61 - 132%   | PASS     |
| 4-Bromophenylphenyl ether    | Total    | 0.502             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 50              | 50 - 150%   | PASS     |
| 4-Chloroaniline              | Total    | 0.975             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 98              | 63 - 130%   | PASS     |
| 4-Chlorophenylphenyl ether   | Total    | 0.744             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 74              | 10 - 159%   | PASS     |
| 4-Nitroaniline               | Total    | 0.813             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 81              | 50 - 150%   | PASS     |
| Aniline                      | Total    | 0.827             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 83              | 0 - 125%    | PASS     |
| Benzidine                    | Total    | 0.943             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 94              | 66 - 122%   | PASS     |
| Bis(2-Chloroethoxy) methane  | Total    | 0.477             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 48              | 43 - 127%   | PASS     |
| Bis(2-Chloroethyl) ether     | Total    | 1.02              | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 102             | 49 - 128%   | PASS     |
| Bis(2-Chloroisopropyl) ether | Total    | 0.928             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 93              | 50 - 150%   | PASS     |
| Dibenzofuran                 | Total    | 36                | 1  | 0.05              | 0.1 | µg/L                | 50          | 0                   | 72              | 50 - 150%   | PASS     |
| Disalicylidenepropanediamine | Total    | 0.824             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 82              | 27 - 130%   | PASS     |
| Hexachloroethane             | Total    | 0.826             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 83              | 54 - 111%   | PASS     |
| Nitrobenzene                 | Total    | 1                 | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 100             | 61 - 152%   | PASS     |
| N-Nitrosodi-n-propylamine    | Total    | 0.892             | 1  | 0.05              | 0.1 | µg/L                | 1           | 0                   | 89              | 49 - 142%   | PASS     |
| N-Nitrosodiphenylamine       | Total    |                   |    |                   |     |                     |             |                     |                 |             |          |



## Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

| ANALYTE                      | FRACTION | RESULT | DF | MDL  | RL  | UNITS      | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |    |    |      |
|------------------------------|----------|--------|----|------|-----|------------|-------------|---------------|-----------------|-------------|----------|----|----|------|
| Sample ID: 94651-BS2         |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Matrix: Blank/Matrix         |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| QAQC Procedural Blank        |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Method: EPA 625.1            |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Batch ID: O-35024            |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Prepared: 22-Dec-21          |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| Analyzed: 25-Dec-21          |          |        |    |      |     |            |             |               |                 |             |          |    |    |      |
| (d4-1,4-Dichlorobenzene)     | Total    | 76     | 1  |      |     | % Recovery | 100         | 0             | 76              | 30 - 130%   | PASS     | 0  | 30 | PASS |
| 2-Chloronaphthalene          | Total    | 0.913  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 91              | 53 - 130%   | PASS     | 1  | 30 | PASS |
| 2-Nitroaniline               | Total    | 0.92   | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 92              | 69 - 114%   | PASS     | 2  | 30 | PASS |
| 3-Nitroaniline               | Total    | 0.624  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 62              | 23 - 137%   | PASS     | 10 | 30 | PASS |
| 4-Bromophenylphenyl ether    | Total    | 0.994  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 99              | 61 - 132%   | PASS     | 1  | 30 | PASS |
| 4-Chloroaniline              | Total    | 0.519  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 52              | 50 - 150%   | PASS     | 4  | 30 | PASS |
| 4-Chlorophenylphenyl ether   | Total    | 0.949  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 95              | 63 - 130%   | PASS     | 3  | 30 | PASS |
| 4-Nitroaniline               | Total    | 0.744  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 74              | 10 - 159%   | PASS     | 0  | 30 | PASS |
| Aniline                      | Total    | 0.766  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 77              | 50 - 150%   | PASS     | 5  | 30 | PASS |
| Benzidine                    | Total    | 0.941  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 94              | 0 - 125%    | PASS     | 12 | 30 | PASS |
| Bis(2-Chloroethoxy) methane  | Total    | 0.915  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 92              | 66 - 122%   | PASS     | 2  | 30 | PASS |
| Bis(2-Chloroethyl) ether     | Total    | 0.44   | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 44              | 43 - 127%   | PASS     | 9  | 30 | PASS |
| Bis(2-Chloroisopropyl) ether | Total    | 0.942  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 94              | 49 - 128%   | PASS     | 8  | 30 | PASS |
| Dibenzofuran                 | Total    | 0.923  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 92              | 50 - 150%   | PASS     | 1  | 30 | PASS |
| Disalicylidenepropanediamine | Total    | 39.5   | 1  | 0.05 | 0.1 | µg/L       | 50          | 0             | 79              | 50 - 150%   | PASS     | 9  | 30 | PASS |
| Hexachloroethane             | Total    | 0.821  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 82              | 27 - 130%   | PASS     | 0  | 30 | PASS |
| Nitrobenzene                 | Total    | 0.826  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 83              | 54 - 111%   | PASS     | 0  | 30 | PASS |
| N-Nitrosodi-n-propylamine    | Total    | 0.979  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 98              | 61 - 152%   | PASS     | 2  | 30 | PASS |
| N-Nitrosodiphenylamine       | Total    | 0.895  | 1  | 0.05 | 0.1 | µg/L       | 1           | 0             | 89              | 49 - 142%   | PASS     | 1  | 30 | PASS |



PHYSIS Project ID: 1407003-206  
 Client: Eurofins Eaton Analytical  
 Project: Folder # 975524 Job # 1000014

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

| ANALYTE   | FRACTION | RESULT | DF | MDL   | RL | UNITS      | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |
|---|----------|--------|----|-------|----|------------|-------------|---------------|-----------------|-------------|----------|
| Sample ID: 94651-B1    QAQC Procedural Blank    Matrix: BlankMatrix    Sampled:    Received:  |          |        |    |       |    |            |             |               |                 |             |          |
| <div style="display: flex; justify-content: space-between; font-size: small;"> <span>Method: EPA 625.1</span> <span>Batch ID: O-35024</span> <span>Prepared: 22-Dec-21</span> <span>Analyzed: 25-Dec-21</span> </div> |          |        |    |       |    |            |             |               |                 |             |          |
| (d10-Acenaphthene)  | Total    | 97     | 1  |       |    | % Recovery | 100         | 100           | 97              | 65 - 113%   | PASS     |
| (d10-Phenanthrene)  | Total    | 97     | 1  |       |    | % Recovery | 100         | 100           | 97              | 80 - 111%   | PASS     |
| (d12-Chrysene)  | Total    | 80     | 1  |       |    | % Recovery | 100         | 100           | 80              | 60 - 139%   | PASS     |
| (d12-Perylene)  | Total    | 87     | 1  |       |    | % Recovery | 100         | 100           | 87              | 36 - 161%   | PASS     |
| (d8-Naphthalene)  | Total    | 91     | 1  |       |    | % Recovery | 100         | 100           | 91              | 44 - 119%   | PASS     |
| 1-Methylnaphthalene   | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| 1-Methylphenanthrene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| 2,3,5-Trimethylnaphthalene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| 2,6-Dimethylnaphthalene   | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| 2-Methylnaphthalene   | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Acenaphthene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Acenaphthylene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Anthracene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benz[a]anthracene   | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benzofl[a]pyrene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benzofl[b]fluoranthene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benzofl[e]pyrene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benzofl[g,h,i]perylene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Benzofl[k]fluoranthene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Biphenyl  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Chrysene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Dibenz[a,h]anthracene   | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |
| Dibenzofl[a,l]pyrene  | Total    | ND     | 1  | 0.001 |    | µg/L       |             | 0.005         |                 |             |          |

## Polynuclear Aromatic Hydrocarbons

## QUALITY CONTROL REPORT

| ANALYTE                | FRACTION | RESULT | DF | MDL   | RL    | UNITS | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |
|------------------------|----------|--------|----|-------|-------|-------|-------------|---------------|-----------------|-------------|----------|
| Dibenzothiophene       | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Fluoranthene           | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Fluorene               | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Indeno[1,2,3-cd]pyrene | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Naphthalene            | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Perylene               | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Phenanthrene           | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |
| Pyrene                 | Total    | ND     | 1  | 0.001 | 0.005 | µg/L  |             |               |                 |             |          |

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

| ANALYTE   | FRACTION | RESULT | DF | MDL   | RL | UNITS      | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |
|---|----------|--------|----|-------|----|------------|-------------|---------------|-----------------|-------------|----------|
| Sample ID: 94651-BS1 QAQC Procedural Blank Matrix: BlankMatrix              |          |        |    |       |    |            |             |               |                 |             |          |
| Method: EPA 625.1 Batch ID: O-35024 Prepared: 22-Dec-21 Analyzed: 25-Dec-21 |          |        |    |       |    |            |             |               |                 |             |          |
| (d10-Acenaphthene)  | Total    | 86     | 1  |       |    | % Recovery | 100         | 0             | 86              | 65 - 113%   | PASS     |
| (d10-Phenanthrene)  | Total    | 96     | 1  |       |    | % Recovery | 100         | 0             | 96              | 80 - 111%   | PASS     |
| (d12-Chrysene)  | Total    | 104    | 1  |       |    | % Recovery | 100         | 0             | 104             | 60 - 139%   | PASS     |
| (d12-Perylene)  | Total    | 92     | 1  |       |    | % Recovery | 100         | 0             | 92              | 36 - 161%   | PASS     |
| (d8-Naphthalene)  | Total    | 77     | 1  |       |    | % Recovery | 100         | 0             | 77              | 44 - 119%   | PASS     |
| 1-Methylnaphthalene   | Total    | 0.435  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 87              | 49 - 117%   | PASS     |
| 1-Methylphenanthrene  | Total    | 0.516  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 103             | 66 - 127%   | PASS     |
| 2,3,5-Trimethylnaphthalene  | Total    | 0.474  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 95              | 57 - 120%   | PASS     |
| 2,6-Dimethylnaphthalene   | Total    | 0.452  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 90              | 54 - 117%   | PASS     |
| 2-Methylnaphthalene   | Total    | 1.32   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 88              | 47 - 130%   | PASS     |
| Acenaphthene  | Total    | 1.33   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 89              | 53 - 131%   | PASS     |
| Acenaphthylene  | Total    | 1.4    | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 93              | 43 - 140%   | PASS     |
| Anthracene  | Total    | 1.46   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 97              | 58 - 135%   | PASS     |
| Benz[a]anthracene   | Total    | 1.79   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 119             | 55 - 145%   | PASS     |
| Benzofluoranthene   | Total    | 1.54   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 103             | 51 - 143%   | PASS     |
| Benzofluoranthene   | Total    | 1.85   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 123             | 46 - 165%   | PASS     |
| Benzofluoranthene   | Total    | 0.516  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 103             | 42 - 152%   | PASS     |
| Benzofluoranthene   | Total    | 1.55   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 103             | 63 - 133%   | PASS     |
| Biphenyl  | Total    | 1.62   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 108             | 56 - 145%   | PASS     |
| Chrysene  | Total    | 0.45   | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 90              | 56 - 119%   | PASS     |
| Dibenz[a,h]anthracene   | Total    | 1.67   | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 111             | 56 - 141%   | PASS     |
| Dibenzofluoranthene   | Total    | 1.8    | 1  | 0.001 |    | µg/L       | 1.5         | 0             | 120             | 55 - 150%   | PASS     |
| Dibenzofluoranthene   | Total    | 0.358  | 1  | 0.001 |    | µg/L       | 0.5         | 0             | 72              | 50 - 150%   | PASS     |

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

| ANALYTE                | FRACTION | RESULT | DF | MDL   | RL    | UNITS | SPIKE LEVEL | SOURCE RESULT | ACCURACY % | PRECISION % | QA CODEC |
|------------------------|----------|--------|----|-------|-------|-------|-------------|---------------|------------|-------------|----------|
|                        |          |        |    |       |       |       |             | LIMITS        | LIMITS     | LIMITS      |          |
| Dibenzothiophene       | Total    | 0.504  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 101        | 75 - 113%   | PASS     |
| Fluoranthene           | Total    | 1.64   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 109        | 60 - 146%   | PASS     |
| Fluorene               | Total    | 1.5    | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 100        | 58 - 131%   | PASS     |
| Indeno[1,2,3-cd]pyrene | Total    | 1.9    | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 127        | 50 - 151%   | PASS     |
| Naphthalene            | Total    | 1.19   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 79         | 41 - 126%   | PASS     |
| Perylene               | Total    | 0.486  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 97         | 48 - 141%   | PASS     |
| Phenanthrene           | Total    | 1.49   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 99         | 67 - 127%   | PASS     |
| Pyrene                 | Total    | 1.65   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 110        | 54 - 156%   | PASS     |

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

| ANALYTE   | FRACTION | RESULT   | DF | MDL   | RL    | UNITS | SPIKE LEVEL | SOURCE RESULT | ACCURACY LIMITS | PRECISION % | QA CODEC |   |    |      |
|---|----------|--|----|-------|-------|-------|-------------|---------------|-----------------|-------------|----------|---|----|------|
| Sample ID: 94651-BS2    QAQC Procedural Blank    Matrix: BlankMatrix    Sampled:    Received: |          |  |    |       |       |       |             |               |                 |             |          |   |    |      |
|   |          | Method: EPA 625.1    Batch ID: O-35024    Prepared: 22-Dec-21    Analyzed: 25-Dec-21<br>% Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery    % Recovery |    |       |       |       |             |               |                 |             |          |   |    |      |
| (d10-Acenaphthene)  | Total    | 83   | 1  |       |       | µg/L  | 100         | 0             | 83              | 65 - 113%   | PASS     | 4 | 30 | PASS |
| (d10-Phenanthrene)  | Total    | 95   | 1  |       |       | µg/L  | 100         | 0             | 95              | 80 - 111%   | PASS     | 1 | 30 | PASS |
| (d12-Chrysene)  | Total    | 97   | 1  |       |       | µg/L  | 100         | 0             | 97              | 60 - 139%   | PASS     | 7 | 30 | PASS |
| (d12-Perylene)  | Total    | 92   | 1  |       |       | µg/L  | 100         | 0             | 92              | 36 - 161%   | PASS     | 0 | 30 | PASS |
| (d8-Naphthalene)  | Total    | 76   | 1  |       |       | µg/L  | 100         | 0             | 76              | 44 - 119%   | PASS     | 1 | 30 | PASS |
| 1-Methylnaphthalene   | Total    | 0.426  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 85              | 49 - 117%   | PASS     | 2 | 30 | PASS |
| 1-Methylphenanthrene  | Total    | 0.518  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 104             | 66 - 127%   | PASS     | 1 | 30 | PASS |
| 2,3,5-Trimethylnaphthalene  | Total    | 0.462  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 92              | 57 - 120%   | PASS     | 3 | 30 | PASS |
| 2,6-Dimethylnaphthalene   | Total    | 0.439  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 88              | 54 - 117%   | PASS     | 2 | 30 | PASS |
| 2-Methylnaphthalene   | Total    | 1.29   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 86              | 47 - 130%   | PASS     | 2 | 30 | PASS |
| Acenaphthene  | Total    | 1.31   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 87              | 53 - 131%   | PASS     | 2 | 30 | PASS |
| Acenaphthylene  | Total    | 1.38   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 92              | 43 - 140%   | PASS     | 1 | 30 | PASS |
| Anthracene  | Total    | 1.47   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 98              | 58 - 135%   | PASS     | 1 | 30 | PASS |
| Benz[a]anthracene   | Total    | 1.8  | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 120             | 55 - 145%   | PASS     | 1 | 30 | PASS |
| Benzofluoranthene   | Total    | 1.53   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 102             | 51 - 143%   | PASS     | 1 | 30 | PASS |
| Benzofluoranthene   | Total    | 1.86   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 124             | 46 - 165%   | PASS     | 1 | 30 | PASS |
| Benzofluoranthene   | Total    | 0.514  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 103             | 42 - 152%   | PASS     | 0 | 30 | PASS |
| Benzofluoranthene   | Total    | 1.55   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 103             | 63 - 133%   | PASS     | 0 | 30 | PASS |
| Benzofluoranthene   | Total    | 1.6  | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 107             | 56 - 145%   | PASS     | 1 | 30 | PASS |
| Biphenyl  | Total    | 0.44   | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 88              | 56 - 119%   | PASS     | 2 | 30 | PASS |
| Chrysene  | Total    | 1.68   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 112             | 56 - 141%   | PASS     | 1 | 30 | PASS |
| Dibenz[a,h]anthracene   | Total    | 1.7  | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 113             | 55 - 150%   | PASS     | 6 | 30 | PASS |
| Dibenzofluoranthene   | Total    | 0.372  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 74              | 50 - 150%   | PASS     | 3 | 30 | PASS |

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

| ANALYTE                | FRACTION | RESULT | DF | MDL   | RL    | UNITS | SPIKE LEVEL | SOURCE RESULT | ACCURACY |           | PRECISION |        | QA CODEC |      |
|------------------------|----------|--------|----|-------|-------|-------|-------------|---------------|----------|-----------|-----------|--------|----------|------|
|                        |          |        |    |       |       |       |             |               | %        | LIMITS    | %         | LIMITS |          |      |
| Dibenzothiophene       | Total    | 0.503  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 101      | 75 - 113% | PASS      | 0      | 30       | PASS |
| Fluoranthene           | Total    | 1.64   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 109      | 60 - 146% | PASS      | 0      | 30       | PASS |
| Fluorene               | Total    | 1.47   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 98       | 58 - 131% | PASS      | 2      | 30       | PASS |
| Indeno[1,2,3-cd]pyrene | Total    | 1.88   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 125      | 50 - 151% | PASS      | 2      | 30       | PASS |
| Naphthalene            | Total    | 1.18   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 79       | 41 - 126% | PASS      | 0      | 30       | PASS |
| Perylene               | Total    | 0.485  | 1  | 0.001 | 0.005 | µg/L  | 0.5         | 0             | 97       | 48 - 141% | PASS      | 0      | 30       | PASS |
| Phenanthrene           | Total    | 1.48   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 99       | 67 - 127% | PASS      | 0      | 30       | PASS |
| Pyrene                 | Total    | 1.64   | 1  | 0.001 | 0.005 | µg/L  | 1.5         | 0             | 109      | 54 - 156% | PASS      | 1      | 30       | PASS |

# PHYSICAL Total Ion Chromatogram SIS

TERRA

FAUNA

FLORA

AQUA

AURA

ENVIRONMENTAL ANALYTICAL LABORATORIES, INC.

**REPORT**

Innovative Solutions for a Sustainable Future



Sample ID: 94652

| RT      | Area Pct | Concentration (ng/L) | Library/ID                          | Qual         | Cas Number |
|---------|----------|----------------------|-------------------------------------|--------------|------------|
| 35.1146 | 5.1309   | 1111                 | Anthracene-D10-                     | 1719-06-8    | 95         |
| 10.3429 | 3.0859   | 668                  | Cyclohexane, 1-methyl-2-propyl-     | 4291-79-6    | 92         |
| 10.5311 | 1.7860   | 387                  | Oxalic acid, cyclohexyl ethyl ester | 1000309-30-2 | 91         |
| 10.2839 | 1.6799   | 364                  | 2-Octene, 3,7-dimethyl-, (Z)-       | 6874-32-4    | 85         |
| 10.1730 | 0.8572   | 186                  | Hydroperoxide, 1-ethylbutyl         | 24254-56-6   | 93         |
| 10.1052 | 0.7057   | 153                  | 2,3,3-Trimethyl-1-hexene            | 1000113-52-1 | 88         |
| 10.5282 | 0.6065   | 131                  | Cyclopentanol, 1-methyl-            | 1462-03-9    | 87         |

Concentration estimated using the response for Anthracene-d10

**Sample ID: 94653**

| RT      | Area Pct | Concentration (ng/L) | Library/ID                                | Qual         | Cas Number |
|---------|----------|----------------------|---|--------------|------------|
| 35.1111 | 5.1457   | 1111                 | Anthracene-D10-                           | 1719-06-8    | 96         |
| 10.3427 | 3.2084   | 693                  | Cyclohexane, 1-methyl-2-propyl-           | 4291-79-6    | 92         |
| 10.5300 | 1.9196   | 415                  | 3-Methyl-2-butenic acid, cyclobutyl ester | 1000282-89-1 | 92         |
| 10.5305 | 1.8818   | 406                  | Oxalic acid, cyclohexyl propyl ester      | 1000309-30-3 | 91         |
| 10.2843 | 1.8232   | 394                  | 2-Octene, 3,7-dimethyl-, (Z)-             | 6874-32-4    | 84         |
| 10.1727 | 1.0285   | 222                  | Hydroperoxide, 1-ethylbutyl               | 24254-56-6   | 93         |
| 10.1048 | 0.8540   | 184                  | 2,3,3-Trimethyl-1-hexene                  | 1000113-52-1 | 88         |
| 10.5270 | 0.7654   | 165                  | Cyclopentanol, 1-methyl-                  | 1462-03-9    | 87         |

Concentration estimated using the response for Anthracene-d10

**Sample ID: Lab Blank B1\_35024**

| RT      | Area Pct | Concentration (ng/L) | Library/ID                                 | Qual         | Cas Number |
|---------|----------|----------------------|--|--------------|------------|
| 35.1159 | 4.3876   | 1111                 | Anthracene-D10-                            | 1719-06-8    | 96         |
| 10.3435 | 6.0893   | 1542                 | Cyclohexane, 1-methyl-2-propyl-            | 4291-79-6    | 92         |
| 10.2843 | 3.1069   | 787                  | Octane, 3-methyl-6-methylene-              | 74630-07-2   | 85         |
| 10.5310 | 1.5778   | 400                  | 1,5-Heptadien-4-one, 3,3,6-trimethyl-      | 546-49-6     | 91         |
| 10.1054 | 1.4624   | 370                  | 2,3,3-Trimethyl-1-hexene                   | 1000113-52-1 | 88         |
| 10.1731 | 0.8169   | 207                  | Hydroperoxide, 1-ethylbutyl                | 24254-56-6   | 86         |
| 10.0780 | 0.7711   | 195                  | 1H-Tetrazole                               | 288-94-8     | 86         |
| 10.2268 | 0.7315   | 185                  | Sulfurous acid, di(cyclohexylmethyl) ester | 1010309-22-7 | 81         |

Concentration estimated using the response for Anthracene-d10

# PERFORMANCE CHAIN OF CUSTODY

TERRA ENVIRONMENTAL LABORATORIES, INC. AURA

*Innovative Solutions for Nature*



Eaton Analytical

Ship To:
Physis Environmental Laboratories, Inc
1904 East Wright Circle
Anaheim, CA 92806-6028

Phone: 714-602-5320 Fax:

Folder #: 975524 Report Due: 12/21/2021

Submittal Form Date: 12/16/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 975524 Job # 1000014

Report all quality control data according to Method. Include dates analyzed Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofins.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.
Samples from: HAWAII

rush

Sample ID 202112160536 Client Sample ID for reference onl Alea Well P2 Sample Date & Time Matrix 12/15/21 0956 DW Clip Code PWSID JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Table with 2 columns: Method (EPA 625), Prep Method (EPA 625), Analysis Requested (625 Acid Extractable in ug/L, 625 Base Neutral Extractable in ug/L, 625PAH in ug/L)

Sample ID 202112160538 Client Sample ID for reference onl Halawa Well P2 Sample Date & Time Matrix 12/15/21 1117 DW Clip Code PWSID JLS

Sample type: Sample Event: Facility ID: Sample Point ID: Static ID:

Table with 2 columns: Method (EPA 625), Prep Method (EPA 625), Analysis Requested (625 Acid Extractable in ug/L, 625 Base Neutral Extractable in ug/L, 625PAH in ug/L)

Relinquished by: [Signature]

Received by: [Signature]

Relinquished by: [Signature]

Received by: [Signature]

Date 12-16-21 Time 1508

Date 12-16-21 Time 17:10

Date 12-16-21 Time 17:10

Date 12-16-21 Time 17:10

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Project Iteration ID: 1407003-206  
 Client Name: Eurofins Eaton Analytical  
 Project Name: Folder # 975524 Job # 1000014  
 COC Page Number: 2 of 2  
 Bottle Label Color: NA

**Sample Receipt Summary**

**Receiving Info**

1. Initials Received By: [Signature]
2. Date Received: 12/10/21
3. Time Received: 1710
4. Client Name: Eurofins
5. Courier Information: (Please circle)
  - Client
  - UPS
  - Area Fast
  - DRS
  - FedEx
  - GSO/GLS
  - Ontrac
  - PAMS
  - PHYSIS Driver:
  - i. Start Time: \_\_\_\_\_
  - ii. End Time: \_\_\_\_\_
  - iii. Total Mileage: \_\_\_\_\_
  - iv. Number of Pickups: \_\_\_\_\_
6. Container Information: (Please put the # of containers or circle none)
  - 1 Cooler
  - \_\_\_ Styrofoam Cooler
  - \_\_\_ Boxes
  - None
  - \_\_\_ Carboy(s)
  - \_\_\_ Carboy Trash Can(s)
  - \_\_\_ Carboy Cap(s)
  - Other \_\_\_\_\_
7. What type of ice was used: (Please circle any that apply)
  - Wet Ice
  - Blue Ice
  - Dry Ice
  - Water
  - None
8. Randomly Selected Samples Temperature (°C): 2.7  
 Used I/R Thermometer # 1-2

**Inspection Info**

1. Initials Inspected By: [Signature]

**Sample Integrity Upon Receipt:**

1. COC(s) included and completely filled out..... Yes / No
2. All sample containers arrived intact..... Yes / No
3. All samples listed on COC(s) are present..... Yes / No
4. Information on containers consistent with information on COC(s)..... Yes / No
5. Correct containers and volume for all analyses indicated..... Yes / No
6. All samples received within method holding time..... Yes / No
7. Correct preservation used for all analyses indicated..... Yes / No
8. Name of sampler included on COC(s)..... Yes /  No

Notes: