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# ANALYTICAL REPORT

## PREPARED FOR

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City & County of Honolulu  
630 South Beretania Street  
Public Service Bldg. Room 310  
Honolulu, Hawaii 96843

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## JOB DESCRIPTION

RED-HILL  
Weekly  
RUSH Weekly Red Hill

## JOB NUMBER

380-147393-1

# Eurofins Eaton Analytical Pomona

## Job Notes

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

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

## Compliance Statement

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

## Authorization



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# Definitions/Glossary

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

Job ID: 380-147393-1  
SDG: Weekly

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA TICs

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

### GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
S1+	Surrogate recovery exceeds control limits, high biased.

## Glossary

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

# Case Narrative

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

Job ID: 380-147393-1

**Job ID: 380-147393-1**

**Eurofins Eaton Analytical Pomona**

## Job Narrative 380-147393-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

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

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

### Receipt

The samples were received on 4/24/2025 9:34 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 2.1°C.

### GC/MS Semi VOA

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

### Gasoline Range Organics

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

### Diesel Range Organics

Method 8015B\_DRO\_LL\_CS: The method reporting limit check (MRL) for preparation batch 570-563894 and analytical batch 570-567004 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

Method 8015B\_DRO\_LL\_CS: The surrogate recovery for the blank associated with preparation batch 570-563894 and analytical batch 570-567004 was outside the upper control limits. Method 8015B\_DRO\_LL\_CS: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-568404. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8015B\_DRO\_LL\_CS: The following sample(s) was re-prepared outside of preparation holding time due to confirming the result in the first preparation batch. Method 8015B\_DRO\_LL\_CS: The following sample was re-prepared outside of preparation holding time due to hit confirmation: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065) (380-147393-1). Initial data did not match historical data which was ran within hold time. The rerun of the sample did not match initial run, likely a false positive. Data excluded from final report.

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

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# Detection Summary

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**  
PWSID Number: HI0000331

**Lab Sample ID: 380-147393-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.030		0.0098	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.012		0.0098	ug/L	1		525.2	Total/NA

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)  
(331-203-TP400)**  
PWSID Number: HI0000331

**Lab Sample ID: 380-147393-3**

No Detections.

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)  
(331-203-TP400)**

**Lab Sample ID: 380-147393-4**

No Detections.

This Detection Summary does not include radiochemical test results.

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# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-147393-1**

Date Collected: 04/21/25 09:57

Matrix: Drinking Water

Date Received: 04/24/25 09:34

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2,4'-DDD	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2,4'-DDE	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2,4'-DDT	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
4,4'-DDD	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
4,4'-DDE	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
4,4'-DDT	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Acenaphthene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Acenaphthylene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Acetochlor	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Alachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
alpha-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
alpha-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Anthracene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:26	1
Atrazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:26	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:26	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:26	1
beta-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/27/25 09:31	04/28/25 13:26	1
Bromacil	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Butachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:26	1
Chlorobenzilate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Chloroneb	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Chlorpyrifos	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Chrysene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:26	1
delta-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/27/25 09:31	04/28/25 13:26	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
<b>Dieldrin</b>	<b>0.030</b>		0.0098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Diethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:26	1
Dimethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:26	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/27/25 09:31	04/28/25 13:26	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Endrin	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Endrin aldehyde	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
EPTC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1

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# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-147393-1**

Date Collected: 04/21/25 09:57

Matrix: Drinking Water

Date Received: 04/24/25 09:34

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Fluorene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
gamma-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Heptachlor	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:26	1
<b>Heptachlor epoxide (isomer B)</b>	<b>0.012</b>		0.0098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Isophorone	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Lindane	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Malathion	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Methoxychlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Metolachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Molinate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Naphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Parathion	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Phenanthrene	<0.039		0.039	ug/L		04/27/25 09:31	04/28/25 13:26	1
Propachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Simazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Terbacil	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Terbutylazine	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Thiobencarb	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/27/25 09:31	04/28/25 13:26	1
trans-Nonachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:26	1
Trifluralin	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:26	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/27/25 09:31	04/28/25 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	04/27/25 09:31	04/28/25 13:26	1
Perylene-d12	89		70 - 130	04/27/25 09:31	04/28/25 13:26	1
Triphenylphosphate	103		70 - 130	04/27/25 09:31	04/28/25 13:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
2-Methylnaphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Acenaphthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Acenaphthylene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Chrysene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-147393-1**

Date Collected: 04/21/25 09:57

Matrix: Drinking Water

Date Received: 04/24/25 09:34

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Fluorene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Naphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Phenanthrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1
Pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	79		28 - 127	04/25/25 16:28	05/07/25 12:18	1
2-Fluorobiphenyl (Surr)	63		31 - 120	04/25/25 16:28	05/07/25 12:18	1
2-Fluorophenol (Surr)	35		17 - 120	04/25/25 16:28	05/07/25 12:18	1
Nitrobenzene-d5 (Surr)	63		27 - 120	04/25/25 16:28	05/07/25 12:18	1
Phenol-d6 (Surr)	21		10 - 120	04/25/25 16:28	05/07/25 12:18	1
p-Terphenyl-d14 (Surr)	91		45 - 120	04/25/25 16:28	05/07/25 12:18	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
1,2,3,4-Dibenzopyrene	26	T J N	ug/L		13.74	191-30-0	04/25/25 16:28	05/07/25 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	57		33 - 139	04/25/25 16:28	05/07/25 15:49	1
2-Fluorobiphenyl (Surr)	57		33 - 126	04/25/25 16:28	05/07/25 15:49	1
2-Fluorophenol (Surr)	30		12 - 120	04/25/25 16:28	05/07/25 15:49	1
Nitrobenzene-d5 (Surr)	66		36 - 120	04/25/25 16:28	05/07/25 15:49	1
Phenol-d6 (Surr)	22		10 - 120	04/25/25 16:28	05/07/25 15:49	1
p-Terphenyl-d14 (Surr)	85		47 - 131	04/25/25 16:28	05/07/25 15:49	1

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)  
(331-203-TP400)**

**Lab Sample ID: 380-147393-3**

Date Collected: 04/21/25 11:13

Matrix: Drinking Water

Date Received: 04/24/25 09:34

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2,4'-DDD	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2,4'-DDE	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2,4'-DDT	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
4,4'-DDD	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
4,4'-DDE	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
4,4'-DDT	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Acenaphthene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Acenaphthylene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Acetochlor	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Alachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1

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# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)  
(331-203-TP400)**

**Lab Sample ID: 380-147393-3**

**Date Collected: 04/21/25 11:13**

**Matrix: Drinking Water**

**Date Received: 04/24/25 09:34**

**PWSID Number: HI0000331**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
alpha-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Anthracene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:46	1
Atrazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:46	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:46	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:46	1
beta-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/27/25 09:31	04/28/25 13:46	1
Bromacil	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Butachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:46	1
Chlorobenzilate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Chloroneb	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Chlorpyrifos	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Chrysene	<0.020		0.020	ug/L		04/27/25 09:31	04/28/25 13:46	1
delta-BHC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/27/25 09:31	04/28/25 13:46	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Dieldrin	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Diethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:46	1
Dimethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 13:46	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/27/25 09:31	04/28/25 13:46	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Endrin	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Endrin aldehyde	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
EPTC	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Fluoranthene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Fluorene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
gamma-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Heptachlor	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Isophorone	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Lindane	<0.0098		0.0098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Malathion	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Methoxychlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Metolachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Molinate	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1

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# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)**  
**(331-203-TP400)**

**Lab Sample ID: 380-147393-3**

Date Collected: 04/21/25 11:13

Matrix: Drinking Water

Date Received: 04/24/25 09:34

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Parathion	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Phenanthrene	<0.039		0.039	ug/L		04/27/25 09:31	04/28/25 13:46	1
Propachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Simazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Terbacil	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Terbutylazine	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Thiobencarb	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/27/25 09:31	04/28/25 13:46	1
trans-Nonachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 13:46	1
Trifluralin	<0.098		0.098	ug/L		04/27/25 09:31	04/28/25 13:46	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/27/25 09:31	04/28/25 13:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	04/27/25 09:31	04/28/25 13:46	1
Perylene-d12	91		70 - 130	04/27/25 09:31	04/28/25 13:46	1
Triphenylphosphate	99		70 - 130	04/27/25 09:31	04/28/25 13:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
2-Methylnaphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Acenaphthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Acenaphthylene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Chrysene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Fluoranthene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Fluorene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Naphthalene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Phenanthrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1
Pyrene	<0.19		0.19	ug/L		04/25/25 16:28	05/07/25 12:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	96		28 - 127	04/25/25 16:28	05/07/25 12:40	1
2-Fluorobiphenyl (Surr)	82		31 - 120	04/25/25 16:28	05/07/25 12:40	1
2-Fluorophenol (Surr)	48		17 - 120	04/25/25 16:28	05/07/25 12:40	1
Nitrobenzene-d5 (Surr)	86		27 - 120	04/25/25 16:28	05/07/25 12:40	1
Phenol-d6 (Surr)	30		10 - 120	04/25/25 16:28	05/07/25 12:40	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)**  
**(331-203-TP400)**

**Lab Sample ID: 380-147393-3**

Date Collected: 04/21/25 11:13  
Date Received: 04/24/25 09:34

Matrix: Drinking Water  
PWSID Number: HI0000331

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
p-Terphenyl-d14 (Surr)	91		45 - 120	04/25/25 16:28	05/07/25 12:40	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/25/25 16:28	05/07/25 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	60		33 - 139	04/25/25 16:28	05/07/25 13:30	1
2-Fluorobiphenyl (Surr)	68		33 - 126	04/25/25 16:28	05/07/25 13:30	1
2-Fluorophenol (Surr)	42		12 - 120	04/25/25 16:28	05/07/25 13:30	1
Nitrobenzene-d5 (Surr)	88		36 - 120	04/25/25 16:28	05/07/25 13:30	1
Phenol-d6 (Surr)	25		10 - 120	04/25/25 16:28	05/07/25 13:30	1
p-Terphenyl-d14 (Surr)	74		47 - 131	04/25/25 16:28	05/07/25 13:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/28/25 21:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		38 - 134		04/28/25 21:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/28/25 14:57	05/05/25 20:21	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/28/25 14:57	05/05/25 20:21	1
C8-C18	<25		25	ug/L		04/28/25 14:57	05/05/25 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	123		60 - 130	04/28/25 14:57	05/05/25 20:21	1

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)**  
**(331-203-TP400)**

**Lab Sample ID: 380-147393-4**

Date Collected: 04/21/25 11:13  
Date Received: 04/24/25 09:34

Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/28/25 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		38 - 134		04/28/25 17:34	1

# Action Limit Summary

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**  
**(331-206-TP065)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-147393-1**

## Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.012		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)**  
**(331-203-TP400)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-147393-3**

## Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

# Surrogate Summary

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

Job ID: 380-147393-1  
SDG: Weekly

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-147393-1	HALAWA WELLS UNITS 1 & 2 F	95	89	103
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	95	91	99

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-147421-T-1-A MS	Matrix Spike	94	95	100
380-147427-AB-1-A DU	Duplicate	97	77	100
LCS 380-149489/23-A	Lab Control Sample	94	93	97
LCSD 380-149489/24-A	Lab Control Sample Dup	94	94	99
MB 380-149489/21-A	Method Blank	93	86	101
MRL 380-149489/22-A	Lab Control Sample	94	87	95

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-147393-1	HALAWA WELLS UNITS 1 & 2 F	57	57	30	66	22	85
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	60	68	42	88	25	74

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
MB 570-563059/1-A	Method Blank	78	81	47	105	33	85

# Surrogate Summary

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

Job ID: 380-147393-1  
SDG: Weekly

## Surrogate Legend

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-147393-1	HALAWA WELLS UNITS 1 & 2 F	79	63	35	63	21	91
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	96	82	48	86	30	91

## Surrogate Legend

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (2	84

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-147393-4	TB: AIEA WELLS PUMPS 1&2 (	86
380-147415-B-3 MS	Matrix Spike	92
380-147415-B-3 MSD	Matrix Spike Duplicate	90
LCS 570-563681/4	Lab Control Sample	89
LCSD 570-563681/5	Lab Control Sample Dup	87
MB 570-563681/6	Method Blank	81
MRL 570-563681/3	Lab Control Sample	85

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Matrix: Drinking Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (2	123

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

**Matrix: Water**

**Prep Type: Total/NA**

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-147415-C-3-C MS	Matrix Spike	124
380-147415-C-3-D MSD	Matrix Spike Duplicate	113
LCS 570-563894/2-B	Lab Control Sample	120
LCSD 570-563894/3-B	Lab Control Sample Dup	124
MB 570-563894/1-B	Method Blank	134 S1+
MRL 570-563894/4-B	Lab Control Sample	126

### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-147393-1  
 SDG: Weekly

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

**Lab Sample ID: MB 380-149489/21-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2,4'-DDD	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2,4'-DDE	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2,4'-DDT	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
2-Methylnaphthalene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
4,4'-DDD	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
4,4'-DDE	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
4,4'-DDT	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Acenaphthene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Acenaphthylene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Acetochlor	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Alachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
alpha-BHC	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
alpha-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Anthracene	<0.019		0.019	ug/L		04/27/25 09:31	04/28/25 12:25	1
Atrazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/27/25 09:31	04/28/25 12:25	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/27/25 09:31	04/28/25 12:25	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/27/25 09:31	04/28/25 12:25	1
beta-BHC	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/27/25 09:31	04/28/25 12:25	1
Bromacil	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Butachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 12:25	1
Chlorobenzilate	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Chloroneb	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Chlorpyrifos	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Chrysene	<0.019		0.019	ug/L		04/27/25 09:31	04/28/25 12:25	1
delta-BHC	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		04/27/25 09:31	04/28/25 12:25	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Dieldrin	<0.0097		0.0097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Diethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 12:25	1
Dimethylphthalate	<0.49		0.49	ug/L		04/27/25 09:31	04/28/25 12:25	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		04/27/25 09:31	04/28/25 12:25	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Endosulfan sulfate	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Endrin	<0.0097		0.0097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Endrin aldehyde	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
EPTC	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1

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# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: MB 380-149489/21-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Fluorene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
gamma-Chlordane	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Heptachlor	<0.0097		0.0097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Isophorone	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Lindane	<0.0097		0.0097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Malathion	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Methoxychlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Metolachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Molinate	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Naphthalene	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Parathion	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Phenanthrene	<0.039		0.039	ug/L		04/27/25 09:31	04/28/25 12:25	1
Propachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Pyrene	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Simazine	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Terbacil	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Terbutylazine	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Thiobencarb	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/27/25 09:31	04/28/25 12:25	1
trans-Nonachlor	<0.049		0.049	ug/L		04/27/25 09:31	04/28/25 12:25	1
Trifluralin	<0.097		0.097	ug/L		04/27/25 09:31	04/28/25 12:25	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.892	T J	ug/L		2.57	N/A	04/27/25 09:31	04/28/25 12:25	1
Unknown	0.540	T J	ug/L		2.70	N/A	04/27/25 09:31	04/28/25 12:25	1
Decane	2.42	T J N	ug/L		2.83	124-18-5	04/27/25 09:31	04/28/25 12:25	1
Hexadecanamide	0.509	T J N	ug/L		7.16	629-54-9	04/27/25 09:31	04/28/25 12:25	1
9-Octadecenamide, (Z)-	5.18	T J N	ug/L		8.06	301-02-0	04/27/25 09:31	04/28/25 12:25	1
13-Docosenamide, (Z)-	1.04	T J N	ug/L		10.68	112-84-5	04/27/25 09:31	04/28/25 12:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	93		70 - 130	04/27/25 09:31	04/28/25 12:25	1
Perylene-d12	86		70 - 130	04/27/25 09:31	04/28/25 12:25	1
Triphenylphosphate	101		70 - 130	04/27/25 09:31	04/28/25 12:25	1

**Lab Sample ID: LCS 380-149489/23-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.93	1.86		ug/L		97	70 - 130
2,4'-DDD	1.93	1.95		ug/L		101	70 - 130

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# QC Sample Results

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

Job ID: 380-147393-1  
 SDG: Weekly

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

**Lab Sample ID: LCS 380-149489/23-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDE	1.93	2.10		ug/L		109	70 - 130
2,4'-DDT	1.93	1.80		ug/L		93	70 - 130
2,4-Dinitrotoluene	1.93	1.61		ug/L		83	70 - 130
2,6-Dinitrotoluene	1.93	1.88		ug/L		98	70 - 130
2-Methylnaphthalene	1.93	1.85		ug/L		96	70 - 130
4,4'-DDD	1.93	1.86		ug/L		97	70 - 130
4,4'-DDE	1.93	1.89		ug/L		98	70 - 130
4,4'-DDT	1.93	1.88		ug/L		97	70 - 130
Acenaphthene	1.93	1.98		ug/L		103	70 - 130
Acenaphthylene	1.93	1.87		ug/L		97	70 - 130
Acetochlor	1.93	1.91		ug/L		99	70 - 130
Alachlor	1.93	2.19		ug/L		114	70 - 130
alpha-BHC	1.93	2.09		ug/L		109	70 - 130
alpha-Chlordane	1.93	1.87		ug/L		97	70 - 130
Anthracene	1.93	1.92		ug/L		100	70 - 130
Atrazine	1.93	2.02		ug/L		105	70 - 130
Benz(a)anthracene	1.93	1.96		ug/L		102	70 - 130
Benzo[a]pyrene	1.93	1.95		ug/L		101	70 - 130
Benzo[b]fluoranthene	1.93	2.07		ug/L		108	70 - 130
Benzo[g,h,i]perylene	1.93	1.90		ug/L		99	70 - 130
Benzo[k]fluoranthene	1.93	2.19		ug/L		114	70 - 130
beta-BHC	1.93	2.16		ug/L		112	70 - 130
Bis(2-ethylhexyl) phthalate	1.93	1.60		ug/L		83	70 - 130
Bromacil	1.93	1.79		ug/L		93	70 - 130
Butachlor	1.93	1.95		ug/L		101	70 - 130
Butylbenzylphthalate	1.93	2.10		ug/L		109	70 - 130
Chlorobenzilate	1.93	1.92		ug/L		100	70 - 130
Chloroneb	1.93	1.97		ug/L		102	70 - 130
Chlorothalonil (Draconil, Bravo)	1.93	2.00		ug/L		104	70 - 130
Chlorpyrifos	1.93	2.13		ug/L		111	70 - 130
Chrysene	1.93	2.10		ug/L		109	70 - 130
delta-BHC	1.93	2.07		ug/L		108	70 - 130
Di(2-ethylhexyl)adipate	1.93	1.87		ug/L		97	70 - 130
Dibenz(a,h)anthracene	1.93	1.86		ug/L		97	70 - 130
Diclorvos (DDVP)	1.93	1.89		ug/L		98	70 - 130
Dieldrin	1.93	2.04		ug/L		106	70 - 130
Diethylphthalate	1.93	2.02		ug/L		105	70 - 130
Dimethylphthalate	1.93	2.02		ug/L		105	70 - 130
Di-n-butyl phthalate	3.85	3.85		ug/L		100	70 - 130
Di-n-octyl phthalate	1.93	1.46		ug/L		76	70 - 130
Endosulfan I (Alpha)	1.93	2.04		ug/L		106	70 - 130
Endosulfan II (Beta)	1.93	2.06		ug/L		107	70 - 130
Endosulfan sulfate	1.93	1.99		ug/L		103	70 - 130
Endrin	1.93	2.07		ug/L		107	70 - 130
Endrin aldehyde	1.93	1.82		ug/L		95	60 - 130
EPTC	1.93	2.00		ug/L		104	70 - 130
Fluoranthene	1.93	2.03		ug/L		106	70 - 130
Fluorene	1.93	2.01		ug/L		104	70 - 130
gamma-Chlordane	1.93	1.83		ug/L		95	70 - 130

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# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: LCS 380-149489/23-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor	1.93	2.04		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	1.93	1.92		ug/L		100	70 - 130
Hexachlorobenzene	1.93	1.86		ug/L		97	70 - 130
Hexachlorocyclopentadiene	1.93	1.90		ug/L		98	70 - 130
Indeno[1,2,3-cd]pyrene	1.93	1.89		ug/L		98	70 - 130
Isophorone	1.93	1.83		ug/L		95	70 - 130
Lindane	1.93	2.25		ug/L		117	70 - 130
Malathion	1.93	1.90		ug/L		99	70 - 130
Methoxychlor	1.93	1.93		ug/L		100	70 - 130
Metolachlor	1.93	1.91		ug/L		99	70 - 130
Molinate	1.93	2.07		ug/L		107	70 - 130
Naphthalene	1.93	1.84		ug/L		96	70 - 130
Parathion	1.93	1.98		ug/L		103	70 - 130
Pendimethalin (Penoxaline)	1.93	1.72		ug/L		89	70 - 130
Phenanthrene	1.93	1.94		ug/L		101	70 - 130
Propachlor	1.93	2.12		ug/L		110	70 - 130
Pyrene	1.93	1.99		ug/L		103	70 - 130
Simazine	1.93	1.91		ug/L		99	70 - 130
Terbacil	1.93	1.99		ug/L		103	70 - 130
Terbutylazine	1.93	2.10		ug/L		109	70 - 130
Thiobencarb	1.93	1.95		ug/L		101	70 - 130
trans-Nonachlor	1.93	1.77		ug/L		92	70 - 130
Trifluralin	1.93	1.66		ug/L		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	97		70 - 130

**Lab Sample ID: LCSD 380-149489/24-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.94	1.91		ug/L		98	70 - 130	2	20
2,4'-DDD	1.94	2.00		ug/L		103	70 - 130	2	20
2,4'-DDE	1.94	2.12		ug/L		109	70 - 130	1	20
2,4'-DDT	1.94	1.87		ug/L		96	70 - 130	4	20
2,4-Dinitrotoluene	1.94	1.72		ug/L		89	70 - 130	7	20
2,6-Dinitrotoluene	1.94	2.02		ug/L		104	70 - 130	7	20
2-Methylnaphthalene	1.94	1.91		ug/L		98	70 - 130	3	20
4,4'-DDD	1.94	1.96		ug/L		101	70 - 130	5	20
4,4'-DDE	1.94	1.98		ug/L		102	70 - 130	5	20
4,4'-DDT	1.94	1.95		ug/L		101	70 - 130	4	20
Acenaphthene	1.94	2.02		ug/L		104	70 - 130	2	20
Acenaphthylene	1.94	1.99		ug/L		102	70 - 130	6	20
Acetochlor	1.94	1.94		ug/L		100	70 - 130	1	20
Alachlor	1.94	2.24		ug/L		115	70 - 130	2	20

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: LCSD 380-149489/24-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
alpha-BHC	1.94	2.10		ug/L		108	70 - 130	0	20	
alpha-Chlordane	1.94	1.97		ug/L		101	70 - 130	5	20	
Anthracene	1.94	1.96		ug/L		101	70 - 130	2	20	
Atrazine	1.94	2.05		ug/L		106	70 - 130	1	20	
Benz(a)anthracene	1.94	2.01		ug/L		104	70 - 130	2	20	
Benzo[a]pyrene	1.94	2.06		ug/L		106	70 - 130	6	20	
Benzo[b]fluoranthene	1.94	2.16		ug/L		111	70 - 130	4	20	
Benzo[g,h,i]perylene	1.94	1.97		ug/L		101	70 - 130	4	20	
Benzo[k]fluoranthene	1.94	2.20		ug/L		113	70 - 130	0	20	
beta-BHC	1.94	2.17		ug/L		112	70 - 130	0	20	
Bis(2-ethylhexyl) phthalate	1.94	1.76		ug/L		90	70 - 130	9	20	
Bromacil	1.94	1.99		ug/L		103	70 - 130	11	20	
Butachlor	1.94	2.05		ug/L		106	70 - 130	5	20	
Butylbenzylphthalate	1.94	2.16		ug/L		111	70 - 130	3	20	
Chlorobenzilate	1.94	2.00		ug/L		103	70 - 130	4	20	
Chloroneb	1.94	2.04		ug/L		105	70 - 130	4	20	
Chlorothalonil (Draconil, Bravo)	1.94	2.06		ug/L		106	70 - 130	3	20	
Chlorpyrifos	1.94	2.21		ug/L		114	70 - 130	3	20	
Chrysene	1.94	2.13		ug/L		109	70 - 130	1	20	
delta-BHC	1.94	2.12		ug/L		109	70 - 130	2	20	
Di(2-ethylhexyl)adipate	1.94	1.93		ug/L		100	70 - 130	3	20	
Dibenz(a,h)anthracene	1.94	1.87		ug/L		96	70 - 130	0	20	
Diclorvos (DDVP)	1.94	2.04		ug/L		105	70 - 130	8	20	
Dieldrin	1.94	2.06		ug/L		106	70 - 130	1	20	
Diethylphthalate	1.94	2.08		ug/L		107	70 - 130	3	20	
Dimethylphthalate	1.94	2.08		ug/L		107	70 - 130	3	20	
Di-n-butyl phthalate	3.88	3.95		ug/L		102	70 - 130	3	20	
Di-n-octyl phthalate	1.94	1.68		ug/L		87	70 - 130	14	20	
Endosulfan I (Alpha)	1.94	2.08		ug/L		107	70 - 130	2	20	
Endosulfan II (Beta)	1.94	2.10		ug/L		108	70 - 130	2	20	
Endosulfan sulfate	1.94	2.07		ug/L		106	70 - 130	4	20	
Endrin	1.94	2.14		ug/L		110	70 - 130	3	20	
Endrin aldehyde	1.94	1.92		ug/L		99	60 - 130	5	20	
EPTC	1.94	2.08		ug/L		107	70 - 130	3	20	
Fluoranthene	1.94	2.09		ug/L		108	70 - 130	3	20	
Fluorene	1.94	2.05		ug/L		105	70 - 130	2	20	
gamma-Chlordane	1.94	1.94		ug/L		100	70 - 130	6	20	
Heptachlor	1.94	2.11		ug/L		109	70 - 130	3	20	
Heptachlor epoxide (isomer B)	1.94	2.01		ug/L		103	70 - 130	4	20	
Hexachlorobenzene	1.94	1.89		ug/L		97	70 - 130	1	20	
Hexachlorocyclopentadiene	1.94	1.99		ug/L		102	70 - 130	5	20	
Indeno[1,2,3-cd]pyrene	1.94	1.94		ug/L		100	70 - 130	2	20	
Isophorone	1.94	1.93		ug/L		99	70 - 130	5	20	
Lindane	1.94	2.24		ug/L		115	70 - 130	1	20	
Malathion	1.94	1.98		ug/L		102	70 - 130	4	20	
Methoxychlor	1.94	1.98		ug/L		102	70 - 130	3	20	
Metolachlor	1.94	1.97		ug/L		102	70 - 130	3	20	
Molinate	1.94	2.10		ug/L		108	70 - 130	2	20	
Naphthalene	1.94	1.88		ug/L		97	70 - 130	2	20	

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: LCSD 380-149489/24-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Parathion	1.94	2.05		ug/L		106	70 - 130	3	20
Pendimethalin (Penoxaline)	1.94	1.81		ug/L		93	70 - 130	5	20
Phenanthrene	1.94	1.95		ug/L		100	70 - 130	0	20
Propachlor	1.94	2.17		ug/L		112	70 - 130	2	20
Pyrene	1.94	2.02		ug/L		104	70 - 130	1	20
Simazine	1.94	2.01		ug/L		103	70 - 130	5	20
Terbacil	1.94	2.11		ug/L		109	70 - 130	6	20
Terbutylazine	1.94	2.06		ug/L		106	70 - 130	2	20
Thiobencarb	1.94	2.03		ug/L		105	70 - 130	4	20
trans-Nonachlor	1.94	1.85		ug/L		95	70 - 130	5	20
Trifluralin	1.94	1.78		ug/L		91	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	99		70 - 130

**Lab Sample ID: MRL 380-149489/22-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0972	0.0991		ug/L		102	50 - 150
2,4'-DDD	0.0972	0.0805	J	ug/L		83	50 - 150
2,4'-DDE	0.0972	0.0963	J	ug/L		99	50 - 150
2,4'-DDT	0.0972	0.0996		ug/L		102	50 - 150
2,4-Dinitrotoluene	0.0972	0.0894	J	ug/L		92	50 - 150
2,6-Dinitrotoluene	0.0972	0.108		ug/L		111	50 - 150
2-Methylnaphthalene	0.0972	0.0946	J	ug/L		97	50 - 150
4,4'-DDD	0.0972	0.100		ug/L		103	50 - 150
4,4'-DDE	0.0972	0.0852	J	ug/L		88	50 - 150
4,4'-DDT	0.0972	0.108		ug/L		111	50 - 150
Acenaphthene	0.0972	0.0898	J	ug/L		92	50 - 150
Acenaphthylene	0.0972	0.0816	J	ug/L		84	50 - 150
Acetochlor	0.0972	0.109		ug/L		112	50 - 150
Alachlor	0.0486	0.0469	J	ug/L		96	50 - 150
alpha-BHC	0.0972	0.0977		ug/L		100	50 - 150
alpha-Chlordane	0.0243	<0.028		ug/L		109	50 - 150
Anthracene	0.0194	0.0180	J	ug/L		93	50 - 150
Atrazine	0.0486	0.0594		ug/L		122	50 - 150
Benz(a)anthracene	0.0486	0.0478	J	ug/L		98	50 - 150
Benzo[a]pyrene	0.0194	0.0135	J	ug/L		69	50 - 150
Benzo[b]fluoranthene	0.0194	0.0182	J	ug/L		94	50 - 150
Benzo[g,h,i]perylene	0.0486	0.0454	J	ug/L		93	50 - 150
Benzo[k]fluoranthene	0.0194	0.0177	J	ug/L		91	50 - 150
beta-BHC	0.0972	0.100		ug/L		103	50 - 150
Bis(2-ethylhexyl) phthalate	0.583	0.541	J	ug/L		93	50 - 150
Bromacil	0.0972	0.0930	J	ug/L		96	50 - 150

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: MRL 380-149489/22-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Butachlor	0.0486	0.0608		ug/L		125	50 - 150
Butylbenzylphthalate	0.486	0.534		ug/L		110	50 - 150
Chlorobenzilate	0.0972	0.0940	J	ug/L		97	50 - 150
Chloroneb	0.0972	0.0987		ug/L		102	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0972	0.0960	J	ug/L		99	50 - 150
Chlorpyrifos	0.0486	0.0440	J	ug/L		90	50 - 150
Chrysene	0.0194	0.0215		ug/L		110	50 - 150
delta-BHC	0.0972	0.0943	J	ug/L		97	50 - 150
Di(2-ethylhexyl)adipate	0.583	0.610		ug/L		105	50 - 150
Dibenz(a,h)anthracene	0.0486	0.0488	J	ug/L		100	50 - 150
Diclorvos (DDVP)	0.0486	0.0524		ug/L		108	50 - 150
Dieldrin	0.00972	0.0113		ug/L		116	50 - 150
Diethylphthalate	0.486	0.480	J	ug/L		99	50 - 150
Dimethylphthalate	0.486	0.487	J	ug/L		100	50 - 150
Di-n-butyl phthalate	0.486	0.456	J	ug/L		94	49 - 243
Di-n-octyl phthalate	0.0972	0.0865	J	ug/L		89	50 - 150
Endosulfan I (Alpha)	0.0972	0.0885	J	ug/L		91	50 - 150
Endosulfan II (Beta)	0.0972	0.0998		ug/L		103	50 - 150
Endosulfan sulfate	0.0972	0.106		ug/L		109	50 - 150
Endrin	0.00972	0.00930	J	ug/L		96	50 - 150
Endrin aldehyde	0.0972	0.0960	J	ug/L		99	50 - 150
EPTC	0.0972	0.0909	J	ug/L		93	50 - 150
Fluoranthene	0.0972	0.0933	J	ug/L		96	50 - 150
Fluorene	0.0486	<0.049		ug/L		98	50 - 150
gamma-Chlordane	0.0243	0.0252	J	ug/L		104	50 - 150
Heptachlor	0.00972	0.00809	J	ug/L		83	50 - 150
Heptachlor epoxide (isomer B)	0.00972	0.0101		ug/L		104	50 - 150
Hexachlorobenzene	0.0486	0.0440	J	ug/L		91	50 - 150
Hexachlorocyclopentadiene	0.0486	0.0396	J	ug/L		81	50 - 150
Indeno[1,2,3-cd]pyrene	0.0486	0.0471	J	ug/L		97	50 - 150
Isophorone	0.0972	0.110		ug/L		113	50 - 150
Lindane	0.00972	0.00944	J	ug/L		97	50 - 150
Malathion	0.0972	0.0950	J	ug/L		98	50 - 150
Methoxychlor	0.0486	0.0645		ug/L		133	50 - 150
Metolachlor	0.0486	0.0553		ug/L		114	50 - 150
Molinate	0.0972	0.0954	J	ug/L		98	50 - 150
Naphthalene	0.0972	0.0967	J	ug/L		99	50 - 150
Parathion	0.0972	0.0834	J	ug/L		86	50 - 150
Pendimethalin (Penoxaline)	0.0972	0.0879	J	ug/L		90	50 - 150
Phenanthrene	0.0389	0.0424		ug/L		109	50 - 150
Propachlor	0.0486	0.0500		ug/L		103	50 - 150
Pyrene	0.0486	0.0566		ug/L		116	50 - 150
Simazine	0.0486	0.0592		ug/L		122	50 - 150
Terbacil	0.0972	0.0957	J	ug/L		98	50 - 150
Terbutylazine	0.0972	0.101		ug/L		104	50 - 150
Thiobencarb	0.0972	0.100		ug/L		103	50 - 150
trans-Nonachlor	0.0243	<0.025		ug/L		101	50 - 150
Trifluralin	0.0972	0.0899	J	ug/L		92	50 - 150

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: MRL 380-149489/22-A**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	87		70 - 130
Triphenylphosphate	95		70 - 130

**Lab Sample ID: 380-147421-T-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	<0.096		1.93	1.89		ug/L		98	70 - 130
2,4'-DDD	<0.096		1.93	2.01		ug/L		104	70 - 130
2,4'-DDE	<0.096		1.93	2.07		ug/L		107	70 - 130
2,4'-DDT	<0.096		1.93	1.86		ug/L		96	70 - 130
2,4-Dinitrotoluene	<0.096		1.93	1.67		ug/L		87	70 - 130
2,6-Dinitrotoluene	<0.096		1.93	1.94		ug/L		100	70 - 130
2-Methylnaphthalene	<0.096		1.93	1.88		ug/L		97	70 - 130
4,4'-DDD	<0.096		1.93	1.93		ug/L		100	70 - 130
4,4'-DDE	<0.096		1.93	1.94		ug/L		100	70 - 130
4,4'-DDT	<0.096		1.93	1.95		ug/L		101	70 - 130
Acenaphthene	<0.096		1.93	2.00		ug/L		104	70 - 130
Acenaphthylene	<0.096		1.93	1.95		ug/L		101	70 - 130
Acetochlor	<0.096		1.93	1.95		ug/L		101	70 - 130
Alachlor	<0.048		1.93	2.23		ug/L		115	70 - 130
alpha-BHC	<0.096		1.93	2.07		ug/L		107	70 - 130
alpha-Chlordane	<0.048		1.93	1.92		ug/L		99	70 - 130
Anthracene	<0.019		1.93	1.82		ug/L		94	70 - 130
Atrazine	<0.048		1.93	2.06		ug/L		106	70 - 130
Benz(a)anthracene	<0.048		1.93	2.04		ug/L		106	70 - 130
Benzo[a]pyrene	<0.019		1.93	2.01		ug/L		104	70 - 130
Benzo[b]fluoranthene	<0.019		1.93	2.20		ug/L		114	70 - 130
Benzo[g,h,i]perylene	<0.048		1.93	1.94		ug/L		101	70 - 130
Benzo[k]fluoranthene	<0.019		1.93	2.22		ug/L		115	70 - 130
beta-BHC	<0.096		1.93	2.08		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.93	1.76		ug/L		91	70 - 130
Bromacil	<0.096		1.93	1.94		ug/L		100	70 - 130
Butachlor	<0.048		1.93	2.03		ug/L		105	70 - 130
Butylbenzylphthalate	<0.48		1.93	2.19		ug/L		113	70 - 130
Chlorobenzilate	<0.096		1.93	1.99		ug/L		103	70 - 130
Chloroneb	<0.096		1.93	1.98		ug/L		102	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.096		1.93	2.10		ug/L		109	70 - 130
Chlorpyrifos	<0.048		1.93	2.20		ug/L		114	70 - 130
Chrysene	<0.019		1.93	2.13		ug/L		110	70 - 130
delta-BHC	<0.096		1.93	2.14		ug/L		111	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.93	1.99		ug/L		103	70 - 130
Dibenz(a,h)anthracene	<0.048		1.93	1.84		ug/L		95	70 - 130
Diclorvos (DDVP)	<0.048		1.93	1.94		ug/L		101	70 - 130
Dieldrin	<0.0096		1.93	2.04		ug/L		106	70 - 130
Diethylphthalate	<0.48		1.93	2.04		ug/L		106	70 - 130

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: 380-147421-T-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Dimethylphthalate	<0.48		1.93	2.01		ug/L		104	70 - 130
Di-n-butyl phthalate	<0.96		3.86	3.94		ug/L		102	70 - 130
Di-n-octyl phthalate	<0.096		1.93	1.63		ug/L		84	70 - 130
Endosulfan I (Alpha)	<0.096		1.93	2.05		ug/L		106	70 - 130
Endosulfan II (Beta)	<0.096		1.93	2.11		ug/L		109	70 - 130
Endosulfan sulfate	<0.096		1.93	2.02		ug/L		105	70 - 130
Endrin	<0.0096		1.93	2.13		ug/L		110	70 - 130
Endrin aldehyde	<0.096		1.93	1.73		ug/L		89	60 - 130
EPTC	<0.096		1.93	2.04		ug/L		105	70 - 130
Fluoranthene	<0.096		1.93	2.09		ug/L		108	70 - 130
Fluorene	<0.048		1.93	2.04		ug/L		106	70 - 130
gamma-Chlordane	<0.048		1.93	1.95		ug/L		101	70 - 130
Heptachlor	<0.0096		1.93	2.06		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	<0.0096		1.93	2.01		ug/L		104	70 - 130
Hexachlorobenzene	<0.048		1.93	1.89		ug/L		98	70 - 130
Hexachlorocyclopentadiene	<0.048		1.93	1.99		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.93	1.91		ug/L		99	70 - 130
Isophorone	<0.096		1.93	1.89		ug/L		98	70 - 130
Lindane	<0.0096		1.93	2.19		ug/L		113	70 - 130
Malathion	<0.096		1.93	1.97		ug/L		102	70 - 130
Methoxychlor	<0.048		1.93	2.03		ug/L		105	70 - 130
Metolachlor	<0.048		1.93	1.95		ug/L		101	70 - 130
Molinate	<0.096		1.93	2.06		ug/L		106	70 - 130
Naphthalene	<0.096		1.93	1.86		ug/L		96	70 - 130
Parathion	<0.096		1.93	2.09		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	<0.096		1.93	1.84		ug/L		95	70 - 130
Phenanthrene	<0.038		1.93	1.98		ug/L		103	70 - 130
Propachlor	<0.048		1.93	2.13		ug/L		110	70 - 130
Pyrene	<0.048		1.93	2.02		ug/L		105	70 - 130
Simazine	<0.048		1.93	1.95		ug/L		101	70 - 130
Terbacil	<0.096		1.93	2.09		ug/L		108	70 - 130
Terbutylazine	<0.096		1.93	2.07		ug/L		107	70 - 130
Thiobencarb	<0.096		1.93	2.00		ug/L		104	70 - 130
trans-Nonachlor	<0.048		1.93	1.91		ug/L		99	70 - 130
Trifluralin	<0.096		1.93	1.72		ug/L		89	70 - 130
				<b>MS</b>	<b>MS</b>				
<b>Surrogate</b>				<b>%Recovery</b>	<b>Qualifier</b>				<b>Limits</b>
2-Nitro-m-xylene				94					70 - 130
Perylene-d12				95					70 - 130
Triphenylphosphate				100					70 - 130

**Lab Sample ID: 380-147427-AB-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

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

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: 380-147427-AB-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

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

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: 380-147427-AB-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 149608**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 149489**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Heptachlor	<0.0096		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0096		<0.0097		ug/L		NC	20
Hexachlorobenzene	<0.048		<0.048		ug/L		NC	20
Hexachlorocyclopentadiene	<0.048		<0.048		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.048		<0.048		ug/L		NC	20
Isophorone	<0.096		<0.097		ug/L		NC	20
Lindane	<0.0096		<0.0097		ug/L		NC	20
Malathion	<0.096		<0.097		ug/L		NC	20
Methoxychlor	<0.048		<0.048		ug/L		NC	20
Metolachlor	<0.048		<0.048		ug/L		NC	20
Molinate	<0.096		<0.097		ug/L		NC	20
Naphthalene	<0.096		<0.097		ug/L		NC	20
Parathion	<0.096		<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.096		<0.097		ug/L		NC	20
Phenanthrene	<0.038		<0.039		ug/L		NC	20
Propachlor	<0.048		<0.048		ug/L		NC	20
Pyrene	<0.048		<0.048		ug/L		NC	20
Simazine	<0.048		<0.048		ug/L		NC	20
Terbacil	<0.096		<0.097		ug/L		NC	20
Terbutylazine	<0.096		<0.097		ug/L		NC	20
Thiobencarb	<0.096		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.048		<0.048		ug/L		NC	20
Trifluralin	<0.096		<0.097		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	77		70 - 130
Triphenylphosphate	100		70 - 130

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

**Lab Sample ID: MB 570-563059/1-A**  
**Matrix: Water**  
**Analysis Batch: 567853**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 563059**

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	04/25/25 16:28	05/07/25 12:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	78		33 - 139	04/25/25 16:28	05/07/25 12:20	1
2-Fluorobiphenyl (Surr)	81		33 - 126	04/25/25 16:28	05/07/25 12:20	1
2-Fluorophenol (Surr)	47		12 - 120	04/25/25 16:28	05/07/25 12:20	1
Nitrobenzene-d5 (Surr)	105		36 - 120	04/25/25 16:28	05/07/25 12:20	1
Phenol-d6 (Surr)	33		10 - 120	04/25/25 16:28	05/07/25 12:20	1
p-Terphenyl-d14 (Surr)	85		47 - 131	04/25/25 16:28	05/07/25 12:20	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: MB 570-563681/6**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/28/25 12:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134				04/28/25 12:40	1

**Lab Sample ID: LCS 570-563681/4**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	371		ug/L		93	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	89		38 - 134				

**Lab Sample ID: LCSD 570-563681/5**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	379		ug/L		95	78 - 120	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	87		38 - 134						

**Lab Sample ID: MRL 570-563681/3**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	9.36	J	ug/L		94	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	85		38 - 134				

**Lab Sample ID: 380-147415-B-3 MS**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	387		ug/L		97	68 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	92		38 - 134						

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: 380-147415-B-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 563681**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	375		ug/L		94	68 - 122	3	18
<b>Surrogate</b>		<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>							
4-Bromofluorobenzene (Surr)		90		38 - 134							

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

**Lab Sample ID: MB 570-563894/1-B**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/28/25 14:56	05/05/25 17:53	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/28/25 14:56	05/05/25 17:53	1
C8-C18	<25		25	ug/L		04/28/25 14:56	05/05/25 17:53	1
<b>Surrogate</b>		<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)		134	S1+	60 - 130		04/28/25 14:56	05/05/25 17:53	1

**Lab Sample ID: LCS 570-563894/2-B**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1610		ug/L		101	56 - 127		
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>					
n-Octacosane (Surr)		120		60 - 130					

**Lab Sample ID: LCSD 570-563894/3-B**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1640		ug/L		102	56 - 127	2	23
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>					
n-Octacosane (Surr)		124		60 - 130					

**Lab Sample ID: MRL 570-563894/4-B**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	0.0200	0.0318	^3+	mg/L		159	50 - 150		

# QC Sample Results

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

Job ID: 380-147393-1  
SDG: Weekly

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

**Lab Sample ID: MRL 570-563894/4-B**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

	<i>MRL</i>	<i>MRL</i>	<i>Limits</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	126		60 - 130

**Lab Sample ID: 380-147415-C-3-C MS**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MS</i>	<i>MS</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>
C10-C28	<26	^3+	1610	1670		ug/L		104	70 - 130

	<i>MS</i>	<i>MS</i>	<i>Limits</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	124		60 - 130

**Lab Sample ID: 380-147415-C-3-D MSD**  
**Matrix: Water**  
**Analysis Batch: 567004**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 563894**

	<i>Sample</i>	<i>Sample</i>	<i>Spike</i>	<i>MSD</i>	<i>MSD</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>RPD</i>
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
C10-C28	<26	^3+	1610	1470		ug/L		91	70 - 130	13	20

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

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# QC Association Summary

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

Job ID: 380-147393-1  
 SDG: Weekly

## GC/MS Semi VOA

### Prep Batch: 149489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	525.2	
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	525.2	
MB 380-149489/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-149489/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-149489/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-149489/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-147421-T-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-147427-AB-1-A DU	Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 149608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	525.2	149489
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	525.2	149489
MB 380-149489/21-A	Method Blank	Total/NA	Water	525.2	149489
LCS 380-149489/23-A	Lab Control Sample	Total/NA	Water	525.2	149489
LCSD 380-149489/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	149489
MRL 380-149489/22-A	Lab Control Sample	Total/NA	Water	525.2	149489
380-147421-T-1-A MS	Matrix Spike	Total/NA	Water	525.2	149489
380-147427-AB-1-A DU	Duplicate	Total/NA	Water	525.2	149489

### Prep Batch: 563059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	625.1	
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	625.1	
MB 570-563059/1-A	Method Blank	Total/NA	Water	625.1	

### Analysis Batch: 567829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	625.1 SIM	563059
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	625.1 SIM	563059

### Analysis Batch: 567853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	625.1	563059
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	625.1	563059
MB 570-563059/1-A	Method Blank	Total/NA	Water	625.1	563059

## GC VOA

### Analysis Batch: 563681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	8015B GRO LL	
380-147393-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	8015B GRO LL	
MB 570-563681/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-563681/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-563681/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-563681/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-147415-B-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-147415-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

# QC Association Summary

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

Job ID: 380-147393-1  
 SDG: Weekly

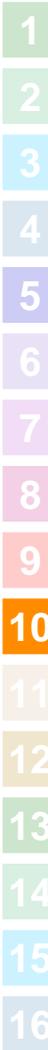
## GC Semi VOA

### Prep Batch: 563894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	3510C	
MB 570-563894/1-B	Method Blank	Total/NA	Water	3510C	
LCS 570-563894/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-563894/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-563894/4-B	Lab Control Sample	Total/NA	Water	3510C	
380-147415-C-3-C MS	Matrix Spike	Total/NA	Water	3510C	
380-147415-C-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 567004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP	Total/NA	Drinking Water	8015B	563894
MB 570-563894/1-B	Method Blank	Total/NA	Water	8015B	563894
LCS 570-563894/2-B	Lab Control Sample	Total/NA	Water	8015B	563894
LCSD 570-563894/3-B	Lab Control Sample Dup	Total/NA	Water	8015B	563894
MRL 570-563894/4-B	Lab Control Sample	Total/NA	Water	8015B	563894
380-147415-C-3-C MS	Matrix Spike	Total/NA	Water	8015B	563894
380-147415-C-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	563894



# Lab Chronicle

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

Job ID: 380-147393-1  
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-147393-1**

**Date Collected: 04/21/25 09:57**

**Matrix: Drinking Water**

**Date Received: 04/24/25 09:34**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			149489	KRD3	EA POM	04/27/25 09:31
Total/NA	Analysis	525.2		1	149608	UPAC	EA POM	04/28/25 13:26
Total/NA	Prep	625.1			563059	UD4J	EET CAL 4	04/25/25 16:28
Total/NA	Analysis	625.1		1	567853	J7WE	EET CAL 4	05/07/25 15:49
Total/NA	Prep	625.1			563059	UD4J	EET CAL 4	04/25/25 16:28
Total/NA	Analysis	625.1 SIM		1	567829	PQS1	EET CAL 4	05/07/25 12:18

**Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)  
(331-203-TP400)**

**Lab Sample ID: 380-147393-3**

**Date Collected: 04/21/25 11:13**

**Matrix: Drinking Water**

**Date Received: 04/24/25 09:34**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			149489	KRD3	EA POM	04/27/25 09:31
Total/NA	Analysis	525.2		1	149608	UPAC	EA POM	04/28/25 13:46
Total/NA	Prep	625.1			563059	UD4J	EET CAL 4	04/25/25 16:28
Total/NA	Analysis	625.1		1	567853	J7WE	EET CAL 4	05/07/25 13:30
Total/NA	Prep	625.1			563059	UD4J	EET CAL 4	04/25/25 16:28
Total/NA	Analysis	625.1 SIM		1	567829	PQS1	EET CAL 4	05/07/25 12:40
Total/NA	Analysis	8015B GRO LL		1	563681	A9VE	EET CAL 4	04/28/25 21:07
Total/NA	Prep	3510C			563894	TVD6	EET CAL 4	04/28/25 14:57
Total/NA	Analysis	8015B		1	567004	NR	EET CAL 4	05/05/25 20:21

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)  
(331-203-TP400)**

**Lab Sample ID: 380-147393-4**

**Date Collected: 04/21/25 11:13**

**Matrix: Water**

**Date Received: 04/24/25 09:34**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	563681	A9VE	EET CAL 4	04/28/25 17:34

**Laboratory References:**

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

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

# Accreditation/Certification Summary

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

Job ID: 380-147393-1  
 SDG: Weekly

## Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor

## Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
Arizona	State	AZ0830	11-16-25
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25

Eurofins Eaton Analytical Pomona

# Accreditation/Certification Summary

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

Job ID: 380-147393-1  
SDG: Weekly

## Laboratory: Eurofins Calscience (Continued)

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

Authority	Program	Identification Number	Expiration Date
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-25

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# Method Summary

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

Job ID: 380-147393-1  
SDG: Weekly

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

#### Protocol References:

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

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

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

# Sample Summary

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

Job ID: 380-147393-1  
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-147393-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	04/21/25 09:57	04/24/25 09:34	HI0000331
380-147393-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Drinking Water	04/21/25 11:13	04/24/25 09:34	HI0000331
380-147393-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	04/21/25 11:13	04/24/25 09:34	

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**Eurofins Eaton Analytical Pomona**

941 Corporate Center Drive  
 Pomona, CA 91768-2642  
 Phone: 626-386-1100

**Chain of Custody Record**



eurofins

Loc: 380  
**147393**

<b>Client Information (Sub Contract Lab)</b>	Sampler: N/A	Lab PM: Lopez, Maria	Carrier Tracking No(s): N/A	COC No: 380-209090.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Maria.Lopez@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1

Company: Eurofins Environment Testing Southwest	Accreditations Required (See note): State - Hawaii	Job #: 380-147393-1
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Address: 2841 Dow Avenue, Suite 100, Tustin, CA, 92780	Due Date Requested: 5/7/2025	<table border="1"> <tr> <th colspan="10">Analysis Requested</th> </tr> <tr> <td>Field Filtered Sample (Yes or No)</td> <td>Uniform MS/MSD (Yes or No)</td> <td>8015B_DRO_LL_CS0510C_LL_HNL Ranges: C10-C24/C24-C36/C8-C18</td> <td>625.1_SIMI625_Prep (MOD) Extended PAH List</td> <td>8015B_GRO_LLJ6030C (MOD) GRO</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Analysis Requested										Field Filtered Sample (Yes or No)	Uniform MS/MSD (Yes or No)	8015B_DRO_LL_CS0510C_LL_HNL Ranges: C10-C24/C24-C36/C8-C18	625.1_SIMI625_Prep (MOD) Extended PAH List	8015B_GRO_LLJ6030C (MOD) GRO							Preservation Codes:
Analysis Requested																								
Field Filtered Sample (Yes or No)	Uniform MS/MSD (Yes or No)		8015B_DRO_LL_CS0510C_LL_HNL Ranges: C10-C24/C24-C36/C8-C18	625.1_SIMI625_Prep (MOD) Extended PAH List	8015B_GRO_LLJ6030C (MOD) GRO																			
City: Tustin	TAT Requested (days): N/A																							
State, Zip: CA, 92780	PO #: N/A																							
Phone: 714-895-5494(Tel)	WO #: N/A																							
Email: N/A	Project #: 38001111																							
Project Name: RED-HILL	SSOW#: N/A																							
Site: Honolulu BWS Sites																								

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Uniform MS/MSD (Yes or No)	8015B_DRO_LL_CS0510C_LL_HNL Ranges: C10-C24/C24-C36/C8-C18	625.1_SIMI625_Prep (MOD) Extended PAH List	8015B_GRO_LLJ6030C (MOD) GRO	Total Number of Containers	Special Instructions/Note:
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HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-147393-1)	4/21/25	09:57 Hawaiian	G	Water			X	X	X	7	MRLs are needed. Confirm any hits >RL
TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-147393-2)	4/21/25	09:57 Hawaiian	G	Water					X	2	MRLs are needed.
AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-147393-3)	4/21/25	11:13 Hawaiian	G	Water			X	X	X	7	MRLs are needed. Confirm any hits >RL
TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-147393-4)	4/21/25	11:13 Hawaiian	G	Water					X	2	MRLs are needed.



380-147393 Chain of Custody

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

<b>Possible Hazard Identification</b>	<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>
Unconfirmed	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: [Signature]	Date/Time: 4/24/25 15:08	Company: [Signature]	Received by: [Signature]
Relinquished by: [Signature]	Date/Time: 4/24/25 16:00	Company: [Signature]	Received by: [Signature]
Relinquished by:	Date/Time:	Company:	Received by:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.0 / 1.5 Seal	

# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-147393-1

SDG Number: Weekly

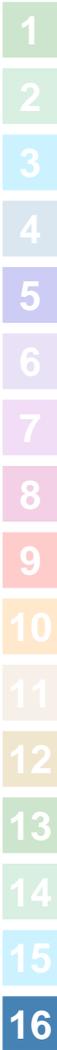
**Login Number: 147393**

**List Number: 1**

**Creator: Segura, Ryan**

**List Source: Eurofins Eaton Analytical Pomona**

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



# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-147393-1

SDG Number: Weekly

**Login Number: 147393**

**List Number: 2**

**Creator: Khana, Piyush**

**List Source: Eurofins Calscience**

**List Creation: 04/24/25 06:17 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

