

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

RED-HILL  
Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells  
RUSH Weekly Red Hill

## JOB NUMBER

380-175895-1

# 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: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA TICs

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

### GC Semi VOA

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

## Glossary

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

# Case Narrative

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

Job ID: 380-175895-1

**Job ID: 380-175895-1**

**Eurofins Eaton Analytical Pomona**

## Job Narrative 380-175895-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 10/9/2025 10:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.6°C.

### GC/MS Semi VOA

Method 625.1: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-639637.

Method 625.1\_SIM: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-639637.

Method 525.2\_PREC: The matrix spike (MS) recovery for preparation batch 380-179303 and analytical batch 380-179597 was below control limits for Anthracene. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-639254. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Method: 3510C\_LL / 8015B\_DRO\_LL\_CS

Method 8015B\_DRO\_LL\_CS: The method reporting limit check (MRL) for preparation batch 570-639254 and analytical batch 570-644132 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

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

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# Detection Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.032		0.0096	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.010		0.0096	ug/L	1		525.2	Total/NA

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

**Lab Sample ID: 380-175895-2**

No Detections.

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**  
PWSID Number: HI0000331

**Lab Sample ID: 380-175895-3**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.022		0.0097	ug/L	1		525.2	Total/NA

**Client Sample ID: TB:MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-175895-4**

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: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

Date Collected: 10/07/25 10:45

Matrix: Drinking Water

Date Received: 10/09/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2,4'-DDD	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2,4'-DDE	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2,4'-DDT	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
2-Methylnaphthalene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
4,4'-DDD	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
4,4'-DDE	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
4,4'-DDT	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Acenaphthene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Acenaphthylene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Acetochlor	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Alachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
alpha-BHC	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
alpha-Chlordane	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Anthracene	<0.019	F1	0.019	ug/L		10/13/25 08:31	10/14/25 12:42	1
Atrazine	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 12:42	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 12:42	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 12:42	1
beta-BHC	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/13/25 08:31	10/14/25 12:42	1
Bromacil	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Butachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 12:42	1
Chlorobenzilate	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Chloroneb	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Chlorpyrifos	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Chrysene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 12:42	1
delta-BHC	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/13/25 08:31	10/14/25 12:42	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
<b>Dieldrin</b>	<b>0.032</b>		0.0096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Diethylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 12:42	1
Dimethylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 12:42	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		10/13/25 08:31	10/14/25 12:42	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Endosulfan sulfate	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Endrin	<0.0096		0.0096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Endrin aldehyde	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
EPTC	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1

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# Client Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

Date Collected: 10/07/25 10:45

Matrix: Drinking Water

Date Received: 10/09/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Fluorene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
gamma-Chlordane	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Heptachlor	<0.0096		0.0096	ug/L		10/13/25 08:31	10/14/25 12:42	1
<b>Heptachlor epoxide (isomer B)</b>	<b>0.010</b>		0.0096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Isophorone	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Lindane	<0.0096		0.0096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Malathion	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Methoxychlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Metolachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Molinate	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Naphthalene	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Parathion	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Phenanthrene	<0.039		0.039	ug/L		10/13/25 08:31	10/14/25 12:42	1
Propachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Pyrene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Simazine	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Terbacil	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Terbutylazine	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Thiobencarb	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/13/25 08:31	10/14/25 12:42	1
trans-Nonachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 12:42	1
Trifluralin	<0.096		0.096	ug/L		10/13/25 08:31	10/14/25 12:42	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/13/25 08:31	10/14/25 12:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	10/13/25 08:31	10/14/25 12:42	1
Perylene-d12	84		70 - 130	10/13/25 08:31	10/14/25 12:42	1
Triphenylphosphate	102		70 - 130	10/13/25 08:31	10/14/25 12:42	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		10/13/25 13:14	10/22/25 11:27	1
2-Methylnaphthalene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Acenaphthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Acenaphthylene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Anthracene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Benzo[a]anthracene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Benzo[a]pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Chrysene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

Date Collected: 10/07/25 10:45

Matrix: Drinking Water

Date Received: 10/09/25 10:20

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		10/13/25 13:14	10/22/25 11:27	1
Fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Fluorene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Naphthalene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Phenanthrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1
Pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 11:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	82		28 - 127	10/13/25 13:14	10/22/25 11:27	1
2-Fluorobiphenyl (Surr)	85		31 - 120	10/13/25 13:14	10/22/25 11:27	1
2-Fluorophenol (Surr)	47		17 - 120	10/13/25 13:14	10/22/25 11:27	1
Nitrobenzene-d5 (Surr)	81		27 - 120	10/13/25 13:14	10/22/25 11:27	1
Phenol-d6 (Surr)	28		10 - 120	10/13/25 13:14	10/22/25 11:27	1
p-Terphenyl-d14 (Surr)	80		45 - 120	10/13/25 13:14	10/22/25 11:27	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
3-Penten-2-one, 4-methyl-	7.1	T J N	ug/L		1.85	141-79-7	10/13/25 13:14	10/22/25 14:04	1
2-Pentene, 3,4-dimethyl-, (E)-	6.1	T J N	ug/L		1.86	4914-92-5	10/13/25 13:14	10/22/25 11:13	1
Unknown	5.8	T J	ug/L		1.90	N/A	10/13/25 13:14	10/22/25 11:13	1
Unknown	7.5	T J	ug/L		1.90	N/A	10/13/25 13:14	10/22/25 14:04	1
3-Hexen-2-one, 5-methyl-	3.9	T J N	ug/L		2.76	5166-53-0	10/13/25 13:14	10/22/25 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	101		33 - 139	10/13/25 13:14	10/22/25 11:13	1
2,4,6-Tribromophenol (Surr)	101		33 - 139	10/13/25 13:14	10/22/25 14:04	1
2-Fluorobiphenyl (Surr)	119		33 - 126	10/13/25 13:14	10/22/25 11:13	1
2-Fluorobiphenyl (Surr)	102		33 - 126	10/13/25 13:14	10/22/25 14:04	1
2-Fluorophenol (Surr)	51		12 - 120	10/13/25 13:14	10/22/25 11:13	1
2-Fluorophenol (Surr)	56		12 - 120	10/13/25 13:14	10/22/25 14:04	1
Nitrobenzene-d5 (Surr)	95		36 - 120	10/13/25 13:14	10/22/25 11:13	1
Nitrobenzene-d5 (Surr)	97		36 - 120	10/13/25 13:14	10/22/25 14:04	1
Phenol-d6 (Surr)	28		10 - 120	10/13/25 13:14	10/22/25 11:13	1
Phenol-d6 (Surr)	30		10 - 120	10/13/25 13:14	10/22/25 14:04	1
p-Terphenyl-d14 (Surr)	105		47 - 131	10/13/25 13:14	10/22/25 11:13	1
p-Terphenyl-d14 (Surr)	101		47 - 131	10/13/25 13:14	10/22/25 14:04	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			10/19/25 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		38 - 134		10/19/25 15:32	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		10/12/25 11:08	10/22/25 00:49	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/12/25 11:08	10/22/25 00:49	1

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# Client Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

Date Collected: 10/07/25 10:45  
Date Received: 10/09/25 10:20

Matrix: Drinking Water  
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C8-C18	<25		25	ug/L		10/12/25 11:08	10/22/25 00:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	115		60 - 130			10/12/25 11:08	10/22/25 00:49	1

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

**Lab Sample ID: 380-175895-2**

Date Collected: 10/07/25 10:45  
Date Received: 10/09/25 10:20

Matrix: Drinking 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			10/19/25 20:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		38 - 134				10/19/25 20:21	1

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

Date Collected: 10/07/25 13:00  
Date Received: 10/09/25 10:20

Matrix: Drinking Water  
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2,4'-DDD	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2,4'-DDE	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2,4'-DDT	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
2-Methylnaphthalene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
4,4'-DDD	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
4,4'-DDE	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
4,4'-DDT	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Acenaphthene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Acenaphthylene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Acetochlor	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Alachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
alpha-BHC	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
alpha-Chlordane	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Anthracene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 13:42	1
Atrazine	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 13:42	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 13:42	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 13:42	1
beta-BHC	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/13/25 08:31	10/14/25 13:42	1
Bromacil	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1

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# Client Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

Date Collected: 10/07/25 13:00

Matrix: Drinking Water

Date Received: 10/09/25 10:20

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 13:42	1
Chlorobenzilate	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Chloroneb	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Chlorpyrifos	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Chrysene	<0.019		0.019	ug/L		10/13/25 08:31	10/14/25 13:42	1
delta-BHC	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/13/25 08:31	10/14/25 13:42	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
<b>Dieldrin</b>	<b>0.022</b>		0.0097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Diethylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 13:42	1
Dimethylphthalate	<0.48		0.48	ug/L		10/13/25 08:31	10/14/25 13:42	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		10/13/25 08:31	10/14/25 13:42	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Endosulfan sulfate	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Endrin	<0.0097		0.0097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Endrin aldehyde	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
EPTC	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Fluoranthene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Fluorene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
gamma-Chlordane	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Heptachlor	<0.0097		0.0097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Isophorone	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Lindane	<0.0097		0.0097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Malathion	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Methoxychlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Metolachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Molinate	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Naphthalene	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Parathion	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Phenanthrene	<0.039		0.039	ug/L		10/13/25 08:31	10/14/25 13:42	1
Propachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Pyrene	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Simazine	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Terbacil	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Terbutylazine	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Thiobencarb	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/13/25 08:31	10/14/25 13:42	1
trans-Nonachlor	<0.048		0.048	ug/L		10/13/25 08:31	10/14/25 13:42	1
Trifluralin	<0.097		0.097	ug/L		10/13/25 08:31	10/14/25 13:42	1

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# Client Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

Date Collected: 10/07/25 13:00

Matrix: Drinking Water

Date Received: 10/09/25 10:20

PWSID Number: HI0000331

<u>Tentatively Identified Compound</u>	<u>Est. Result</u>	<u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>RT</u>	<u>CAS No.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Tentatively Identified Compound	None		ug/L			N/A	10/13/25 08:31	10/14/25 13:42	1
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>				<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
2-Nitro-m-xylene	101		70 - 130				10/13/25 08:31	10/14/25 13:42	1
Perylene-d12	88		70 - 130				10/13/25 08:31	10/14/25 13:42	1
Triphenylphosphate	103		70 - 130				10/13/25 08:31	10/14/25 13:42	1

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

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>RL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
1-Methylnaphthalene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
2-Methylnaphthalene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Acenaphthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Acenaphthylene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Anthracene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Benzo[a]anthracene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Benzo[a]pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Chrysene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Fluoranthene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Fluorene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Naphthalene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Phenanthrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
Pyrene	<0.19		0.19	ug/L		10/13/25 13:14	10/22/25 10:00	1
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>			<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
2,4,6-Tribromophenol (Surr)	90		28 - 127			10/13/25 13:14	10/22/25 10:00	1
2-Fluorobiphenyl (Surr)	96		31 - 120			10/13/25 13:14	10/22/25 10:00	1
2-Fluorophenol (Surr)	53		17 - 120			10/13/25 13:14	10/22/25 10:00	1
Nitrobenzene-d5 (Surr)	88		27 - 120			10/13/25 13:14	10/22/25 10:00	1
Phenol-d6 (Surr)	32		10 - 120			10/13/25 13:14	10/22/25 10:00	1
p-Terphenyl-d14 (Surr)	87		45 - 120			10/13/25 13:14	10/22/25 10:00	1

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

<u>Tentatively Identified Compound</u>	<u>Est. Result</u>	<u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>RT</u>	<u>CAS No.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Unknown	7.5	T J	ug/L		1.90	N/A	10/13/25 13:14	10/22/25 11:37	1
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>				<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
2,4,6-Tribromophenol (Surr)	98		33 - 139				10/13/25 13:14	10/22/25 11:37	1
2-Fluorobiphenyl (Surr)	98		33 - 126				10/13/25 13:14	10/22/25 11:37	1
2-Fluorophenol (Surr)	58		12 - 120				10/13/25 13:14	10/22/25 11:37	1
Nitrobenzene-d5 (Surr)	95		36 - 120				10/13/25 13:14	10/22/25 11:37	1
Phenol-d6 (Surr)	33		10 - 120				10/13/25 13:14	10/22/25 11:37	1
p-Terphenyl-d14 (Surr)	96		47 - 131				10/13/25 13:14	10/22/25 11:37	1

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

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>RL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
GRO (C6-C10)	<10		10	ug/L			10/19/25 15:52	1

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# Client Sample Results

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

Date Collected: 10/07/25 13:00

Matrix: Drinking Water

Date Received: 10/09/25 10:20

PWSID Number: HI0000331

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		38 - 134		10/19/25 15:52	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	-	10/12/25 11:08	10/22/25 01:10	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L	-	10/12/25 11:08	10/22/25 01:10	1
C8-C18	<25		25	ug/L	-	10/12/25 11:08	10/22/25 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	114		60 - 130	10/12/25 11:08	10/22/25 01:10	1

**Client Sample ID: TB:MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-175895-4**

Date Collected: 10/07/25 13:00

Matrix: Drinking Water

Date Received: 10/09/25 10:20

**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	-		10/19/25 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		38 - 134		10/19/25 20:42	1

# Action Limit Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**

**Lab Sample ID: 380-175895-1**

**(331-206-TP065)**

**PWSID Number: HI0000331**

## Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0096		ug/L	2	0.0096	525.2	Total/NA
Heptachlor	<0.0096		ug/L	0.4	0.0096	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.010		ug/L	0.2	0.0096	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Methoxychlor	<0.048		ug/L	40	0.048	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

**PWSID Number: HI0000331**

## Compliance Check

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

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

# Surrogate Summary

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## 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)
380-175895-1	HALAWA WELLS UNITS 1 & 2 F	99	84	102
380-175895-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	100	91	108
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	101	88	103

**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)
380-175898-I-1-A DU	Duplicate	99	82	101
LCS 380-179303/22-A	Lab Control Sample	100	94	107
MB 380-179303/20-A	Method Blank	98	85	101
MRL 380-179303/21-A	Lab Control Sample	101	85	103

**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)
380-175895-1	HALAWA WELLS UNITS 1 & 2 F	101	102	56	97	30	101
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	101	119	51	95	28	105
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	98	98	58	95	33	96

**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)

# Surrogate Summary

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

Job ID: 380-175895-1

SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## 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 570-639637/1-A	Method Blank	91	87	61	89	37	99

### 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)
380-175895-1	HALAWA WELLS UNITS 1 & 2 F	82	85	47	81	28	80
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	90	96	53	88	32	87

### Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
LCS 570-639637/2-A	Lab Control Sample	69	73	54	65	36	74
LCS 570-639637/3-A	Lab Control Sample Dup	67	69	50	62	33	70
MB 570-639637/1-A	Method Blank	65	63	45	69	29	66

### 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)
380-175895-1	HALAWA WELLS UNITS 1 & 2 F	96

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# Surrogate Summary

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

Matrix: Drinking Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-175895-2	TB: HALAWA WELLS UNITS 1 & 2 F	96
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	94
380-175895-4	TB:MOANALUA WELLS (331-223-TP202)	94

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-177173-B-1 MS	Matrix Spike	91
380-177173-B-1 MSD	Matrix Spike Duplicate	94
LCS 570-642768/4	Lab Control Sample	95
LCSD 570-642768/5	Lab Control Sample Dup	93
MB 570-642768/6	Method Blank	91
MRL 570-642768/3	Lab Control Sample	92

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

## 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)
380-175895-1	HALAWA WELLS UNITS 1 & 2 F	115
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	114

**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)
LCS 570-639254/2-A	Lab Control Sample	119
LCSD 570-639254/3-A	Lab Control Sample Dup	111
MB 570-639254/1-A	Method Blank	117
MRL 570-639254/4-A	Lab Control Sample	118

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: MB 380-179303/20-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2,4'-DDD	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2,4'-DDE	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2,4'-DDT	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
2-Methylnaphthalene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
4,4'-DDD	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
4,4'-DDE	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
4,4'-DDT	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Acenaphthene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Acenaphthylene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Acetochlor	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Alachlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
alpha-BHC	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
alpha-Chlordane	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Anthracene	<0.020		0.020	ug/L		10/13/25 08:31	10/14/25 12:22	1
Atrazine	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Benz(a)anthracene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Benzo[a]pyrene	<0.020		0.020	ug/L		10/13/25 08:31	10/14/25 12:22	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		10/13/25 08:31	10/14/25 12:22	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		10/13/25 08:31	10/14/25 12:22	1
beta-BHC	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		10/13/25 08:31	10/14/25 12:22	1
Bromacil	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Butachlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Butylbenzylphthalate	<0.50		0.50	ug/L		10/13/25 08:31	10/14/25 12:22	1
Chlorobenzilate	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Chloroneb	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Chlorpyrifos	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Chrysene	<0.020		0.020	ug/L		10/13/25 08:31	10/14/25 12:22	1
delta-BHC	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		10/13/25 08:31	10/14/25 12:22	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Dieldrin	<0.0099		0.0099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Diethylphthalate	<0.50		0.50	ug/L		10/13/25 08:31	10/14/25 12:22	1
Dimethylphthalate	<0.50		0.50	ug/L		10/13/25 08:31	10/14/25 12:22	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		10/13/25 08:31	10/14/25 12:22	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Endosulfan sulfate	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Endrin	<0.0099		0.0099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Endrin aldehyde	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
EPTC	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1

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# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: MB 380-179303/20-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Fluorene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
gamma-Chlordane	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Heptachlor	<0.0099		0.0099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Hexachlorobenzene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Isophorone	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Lindane	<0.0099		0.0099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Malathion	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Methoxychlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Metolachlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Molinate	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Naphthalene	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Parathion	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Phenanthrene	<0.040		0.040	ug/L		10/13/25 08:31	10/14/25 12:22	1
Propachlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Pyrene	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Simazine	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Terbacil	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Terbutylazine	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Thiobencarb	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		10/13/25 08:31	10/14/25 12:22	1
trans-Nonachlor	<0.050		0.050	ug/L		10/13/25 08:31	10/14/25 12:22	1
Trifluralin	<0.099		0.099	ug/L		10/13/25 08:31	10/14/25 12:22	1

<i>Tentatively Identified Compound</i>	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
9-Octadecenamide, (Z)-	0.496	T J N	ug/L		7.90	301-02-0	10/13/25 08:31	10/14/25 12:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	10/13/25 08:31	10/14/25 12:22	1
Perylene-d12	85		70 - 130	10/13/25 08:31	10/14/25 12:22	1
Triphenylphosphate	101		70 - 130	10/13/25 08:31	10/14/25 12:22	1

**Lab Sample ID: LCS 380-179303/22-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.99	1.84		ug/L		93	70 - 130
2,4'-DDD	1.99	2.04		ug/L		103	70 - 130
2,4'-DDE	1.99	2.05		ug/L		103	70 - 130
2,4'-DDT	1.99	1.98		ug/L		100	70 - 130
2,4-Dinitrotoluene	1.99	1.85		ug/L		93	70 - 130
2,6-Dinitrotoluene	1.99	1.92		ug/L		97	70 - 130
2-Methylnaphthalene	1.99	1.86		ug/L		94	70 - 130

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# QC Sample Results

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: LCS 380-179303/22-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.99	2.12		ug/L		107	70 - 130
4,4'-DDE	1.99	2.13		ug/L		107	70 - 130
4,4'-DDT	1.99	1.83		ug/L		92	70 - 130
Acenaphthene	1.99	1.91		ug/L		96	70 - 130
Acenaphthylene	1.99	1.91		ug/L		96	70 - 130
Acetochlor	1.99	2.17		ug/L		109	70 - 130
Alachlor	1.99	2.22		ug/L		112	70 - 130
alpha-BHC	1.99	2.08		ug/L		105	70 - 130
alpha-Chlordane	1.99	2.02		ug/L		102	70 - 130
Anthracene	1.99	1.77		ug/L		89	70 - 130
Atrazine	1.99	2.21		ug/L		111	70 - 130
Benz(a)anthracene	1.99	1.83		ug/L		92	70 - 130
Benzo[a]pyrene	1.99	1.79		ug/L		90	70 - 130
Benzo[b]fluoranthene	1.99	1.92		ug/L		97	70 - 130
Benzo[g,h,i]perylene	1.99	1.91		ug/L		96	70 - 130
Benzo[k]fluoranthene	1.99	1.91		ug/L		96	70 - 130
beta-BHC	1.99	2.06		ug/L		104	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.06		ug/L		104	70 - 130
Bromacil	1.99	2.19		ug/L		110	70 - 130
Butachlor	1.99	2.15		ug/L		108	70 - 130
Butylbenzylphthalate	1.99	2.20		ug/L		111	70 - 130
Chlorobenzilate	1.99	2.29		ug/L		115	70 - 130
Chloroneb	1.99	1.94		ug/L		98	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.15		ug/L		108	70 - 130
Chlorpyrifos	1.99	2.11		ug/L		106	70 - 130
Chrysene	1.99	1.82		ug/L		92	70 - 130
delta-BHC	1.99	2.08		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.28		ug/L		115	70 - 130
Dibenz(a,h)anthracene	1.99	1.96		ug/L		99	70 - 130
Diclorvos (DDVP)	1.99	2.06		ug/L		104	70 - 130
Dieldrin	1.99	1.99		ug/L		100	70 - 130
Diethylphthalate	1.99	2.16		ug/L		109	70 - 130
Dimethylphthalate	1.99	2.16		ug/L		109	70 - 130
Di-n-butyl phthalate	3.97	4.48		ug/L		113	70 - 130
Di-n-octyl phthalate	1.99	2.05		ug/L		103	70 - 130
Endosulfan I (Alpha)	1.99	2.00		ug/L		101	70 - 130
Endosulfan II (Beta)	1.99	2.09		ug/L		105	70 - 130
Endosulfan sulfate	1.99	2.09		ug/L		105	70 - 130
Endrin	1.99	2.07		ug/L		104	70 - 130
Endrin aldehyde	1.99	2.08		ug/L		105	60 - 130
EPTC	1.99	2.10		ug/L		106	70 - 130
Fluoranthene	1.99	2.09		ug/L		105	70 - 130
Fluorene	1.99	1.98		ug/L		99	70 - 130
gamma-Chlordane	1.99	2.03		ug/L		102	70 - 130
Heptachlor	1.99	2.06		ug/L		104	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.10		ug/L		106	70 - 130
Hexachlorobenzene	1.99	2.00		ug/L		101	70 - 130
Hexachlorocyclopentadiene	1.99	1.84		ug/L		92	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	1.96		ug/L		99	70 - 130

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# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: LCS 380-179303/22-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isophorone	1.99	2.06		ug/L		104	70 - 130
Lindane	1.99	2.01		ug/L		101	70 - 130
Malathion	1.99	2.09		ug/L		105	70 - 130
Methoxychlor	1.99	1.98		ug/L		100	70 - 130
Metolachlor	1.99	2.07		ug/L		104	70 - 130
Molinate	1.99	2.10		ug/L		106	70 - 130
Naphthalene	1.99	1.86		ug/L		94	70 - 130
Parathion	1.99	2.14		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	1.99	1.85		ug/L		93	70 - 130
Phenanthrene	1.99	1.94		ug/L		98	70 - 130
Propachlor	1.99	2.21		ug/L		111	70 - 130
Pyrene	1.99	2.07		ug/L		104	70 - 130
Simazine	1.99	2.20		ug/L		111	70 - 130
Terbacil	1.99	2.21		ug/L		111	70 - 130
Terbutylazine	1.99	2.25		ug/L		113	70 - 130
Thiobencarb	1.99	2.20		ug/L		111	70 - 130
trans-Nonachlor	1.99	1.92		ug/L		97	70 - 130
Trifluralin	1.99	1.86		ug/L		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	107		70 - 130

**Lab Sample ID: MRL 380-179303/21-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0993	0.116		ug/L		117	50 - 150
2,4'-DDD	0.0993	0.0903	J	ug/L		91	50 - 150
2,4'-DDE	0.0993	0.104		ug/L		105	50 - 150
2,4'-DDT	0.0993	0.0963	J	ug/L		97	50 - 150
2,4-Dinitrotoluene	0.0993	0.0998		ug/L		101	50 - 150
2,6-Dinitrotoluene	0.0993	0.124		ug/L		124	50 - 150
2-Methylnaphthalene	0.0993	0.109		ug/L		110	50 - 150
4,4'-DDD	0.0993	0.103		ug/L		104	50 - 150
4,4'-DDE	0.0993	0.0885	J	ug/L		89	50 - 150
4,4'-DDT	0.0993	0.108		ug/L		109	50 - 150
Acenaphthene	0.0993	0.0928	J	ug/L		94	50 - 150
Acenaphthylene	0.0993	0.0979	J	ug/L		99	50 - 150
Acetochlor	0.0993	0.122		ug/L		123	50 - 150
Alachlor	0.0496	0.0542		ug/L		109	50 - 150
alpha-BHC	0.0993	0.109		ug/L		109	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		97	50 - 150
Anthracene	0.0199	0.0215		ug/L		108	50 - 150
Atrazine	0.0496	0.0563		ug/L		114	50 - 150
Benz(a)anthracene	0.0496	0.0549		ug/L		111	50 - 150

# QC Sample Results

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: MRL 380-179303/21-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	0.0199	0.0238		ug/L		120	50 - 150
Benzo[b]fluoranthene	0.0199	0.0243		ug/L		122	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0492	J	ug/L		99	50 - 150
Benzo[k]fluoranthene	0.0199	0.0228		ug/L		115	50 - 150
beta-BHC	0.0993	0.115		ug/L		116	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.647		ug/L		109	50 - 150
Bromacil	0.0993	0.133		ug/L		134	50 - 150
Butachlor	0.0496	0.0621		ug/L		125	50 - 150
Butylbenzylphthalate	0.496	0.579		ug/L		117	50 - 150
Chlorobenzilate	0.0993	0.113		ug/L		114	50 - 150
Chloroneb	0.0993	0.115		ug/L		116	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0993	0.0917	J	ug/L		92	50 - 150
Chlorpyrifos	0.0496	0.0531		ug/L		107	50 - 150
Chrysene	0.0199	0.0221		ug/L		111	50 - 150
delta-BHC	0.0993	0.106		ug/L		107	50 - 150
Di(2-ethylhexyl)adipate	0.596	0.704		ug/L		118	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0457	J	ug/L		92	50 - 150
Diclorvos (DDVP)	0.0496	0.0601		ug/L		121	50 - 150
Dieldrin	0.00993	0.0121		ug/L		122	50 - 150
Diethylphthalate	0.496	0.569		ug/L		115	50 - 150
Dimethylphthalate	0.496	0.561		ug/L		113	50 - 150
Di-n-butyl phthalate	0.496	0.629	J	ug/L		127	49 - 243
Di-n-octyl phthalate	0.0993	0.101		ug/L		102	50 - 150
Endosulfan I (Alpha)	0.0993	0.101		ug/L		102	50 - 150
Endosulfan II (Beta)	0.0993	0.108		ug/L		109	50 - 150
Endosulfan sulfate	0.0993	0.0930	J	ug/L		94	50 - 150
Endrin	0.00993	0.00961	J	ug/L		97	50 - 150
Endrin aldehyde	0.0993	0.118		ug/L		119	50 - 150
EPTC	0.0993	0.112		ug/L		112	50 - 150
Fluoranthene	0.0993	0.105		ug/L		106	50 - 150
Fluorene	0.0496	0.0542		ug/L		109	50 - 150
gamma-Chlordane	0.0248	0.0251	J	ug/L		101	50 - 150
Heptachlor	0.00993	0.00981	J	ug/L		99	50 - 150
Heptachlor epoxide (isomer B)	0.00993	0.0102		ug/L		103	50 - 150
Hexachlorobenzene	0.0496	0.0482	J	ug/L		97	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0436	J	ug/L		88	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0510		ug/L		103	50 - 150
Isophorone	0.0993	0.126		ug/L		127	50 - 150
Lindane	0.00993	0.0124		ug/L		125	50 - 150
Malathion	0.0993	0.111		ug/L		112	50 - 150
Methoxychlor	0.0496	0.0542		ug/L		109	50 - 150
Metolachlor	0.0496	0.0614		ug/L		124	50 - 150
Molinate	0.0993	0.112		ug/L		112	50 - 150
Naphthalene	0.0993	0.114		ug/L		115	50 - 150
Parathion	0.0993	0.0952	J	ug/L		96	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.0933	J	ug/L		94	50 - 150
Phenanthrene	0.0397	0.0387	J	ug/L		98	50 - 150
Propachlor	0.0496	0.0605		ug/L		122	50 - 150
Pyrene	0.0496	0.0517		ug/L		104	50 - 150

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# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: MRL 380-179303/21-A**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Simazine	0.0496	0.0518		ug/L		104	50 - 150
Terbacil	0.0993	0.127		ug/L		128	50 - 150
Terbutylazine	0.0993	0.113		ug/L		114	50 - 150
Thiobencarb	0.0993	0.114		ug/L		115	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		102	50 - 150
Trifluralin	0.0993	0.0978	J	ug/L		99	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	85		70 - 130
Triphenylphosphate	103		70 - 130

**Lab Sample ID: 380-175895-1 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 179597**

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.096		1.92	1.83		ug/L		95	70 - 130
2,4'-DDD	<0.096		1.92	1.98		ug/L		103	70 - 130
2,4'-DDE	<0.096		1.92	1.91		ug/L		100	70 - 130
2,4'-DDT	<0.096		1.92	1.83		ug/L		96	70 - 130
2,4-Dinitrotoluene	<0.096		1.92	1.83		ug/L		96	70 - 130
2,6-Dinitrotoluene	<0.096		1.92	1.90		ug/L		99	70 - 130
2-Methylnaphthalene	<0.096		1.92	1.86		ug/L		97	70 - 130
4,4'-DDD	<0.096		1.92	2.06		ug/L		107	70 - 130
4,4'-DDE	<0.096		1.92	1.94		ug/L		101	70 - 130
4,4'-DDT	<0.096		1.92	1.66		ug/L		86	70 - 130
Acenaphthene	<0.096		1.92	1.87		ug/L		97	70 - 130
Acenaphthylene	<0.096		1.92	1.82		ug/L		95	70 - 130
Acetochlor	<0.096		1.92	2.10		ug/L		110	70 - 130
Alachlor	<0.048		1.92	2.16		ug/L		113	70 - 130
alpha-BHC	<0.096		1.92	2.05		ug/L		107	70 - 130
alpha-Chlordane	<0.048		1.92	1.99		ug/L		102	70 - 130
Anthracene	<0.019	F1	1.92	1.23	F1	ug/L		64	70 - 130
Atrazine	<0.048		1.92	2.22		ug/L		116	70 - 130
Benz(a)anthracene	<0.048		1.92	1.71		ug/L		89	70 - 130
Benzo[a]pyrene	<0.019		1.92	1.50		ug/L		78	70 - 130
Benzo[b]fluoranthene	<0.019		1.92	1.89		ug/L		99	70 - 130
Benzo[g,h,i]perylene	<0.048		1.92	1.76		ug/L		92	70 - 130
Benzo[k]fluoranthene	<0.019		1.92	1.77		ug/L		92	70 - 130
beta-BHC	<0.096		1.92	2.00		ug/L		104	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.92	1.60		ug/L		83	70 - 130
Bromacil	<0.096		1.92	2.21		ug/L		112	70 - 130
Butachlor	<0.048		1.92	2.11		ug/L		110	70 - 130
Butylbenzylphthalate	<0.48		1.92	2.18		ug/L		114	70 - 130
Chlorobenzilate	<0.096		1.92	2.26		ug/L		118	70 - 130
Chloroneb	<0.096		1.92	1.88		ug/L		98	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.096		1.92	2.11		ug/L		110	70 - 130

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1 MS**

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

**Matrix: Drinking Water**

**Prep Type: Total/NA**

**Analysis Batch: 179597**

**Prep Batch: 179303**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chlorpyrifos	<0.048		1.92	2.08		ug/L		109	70 - 130
Chrysene	<0.019		1.92	1.81		ug/L		94	70 - 130
delta-BHC	<0.096		1.92	2.00		ug/L		104	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.92	1.85		ug/L		96	70 - 130
Dibenz(a,h)anthracene	<0.048		1.92	1.71		ug/L		89	70 - 130
Diclorvos (DDVP)	<0.048		1.92	2.05		ug/L		107	70 - 130
Dieldrin	0.032		1.92	1.98		ug/L		101	70 - 130
Diethylphthalate	<0.48		1.92	2.14		ug/L		112	70 - 130
Dimethylphthalate	<0.48		1.92	2.11		ug/L		110	70 - 130
Di-n-butyl phthalate	<0.96		3.84	4.33		ug/L		113	70 - 130
Di-n-octyl phthalate	<0.096		1.92	1.50		ug/L		78	70 - 130
Endosulfan I (Alpha)	<0.096		1.92	1.91		ug/L		99	70 - 130
Endosulfan II (Beta)	<0.096		1.92	1.99		ug/L		104	70 - 130
Endosulfan sulfate	<0.096		1.92	2.01		ug/L		105	70 - 130
Endrin	<0.0096		1.92	2.04		ug/L		106	70 - 130
Endrin aldehyde	<0.096		1.92	1.89		ug/L		98	60 - 130
EPTC	<0.096		1.92	2.06		ug/L		107	70 - 130
Fluoranthene	<0.096		1.92	2.06		ug/L		107	70 - 130
Fluorene	<0.048		1.92	1.95		ug/L		101	70 - 130
gamma-Chlordane	<0.048		1.92	1.96		ug/L		101	70 - 130
Heptachlor	<0.0096		1.92	2.02		ug/L		105	70 - 130
Heptachlor epoxide (isomer B)	0.010		1.92	2.04		ug/L		106	70 - 130
Hexachlorobenzene	<0.048		1.92	2.01		ug/L		105	70 - 130
Hexachlorocyclopentadiene	<0.048		1.92	1.84		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.92	1.81		ug/L		94	70 - 130
Isophorone	<0.096		1.92	2.02		ug/L		105	70 - 130
Lindane	<0.0096		1.92	1.97		ug/L		102	70 - 130
Malathion	<0.096		1.92	2.04		ug/L		106	70 - 130
Methoxychlor	<0.048		1.92	1.97		ug/L		102	70 - 130
Metolachlor	<0.048		1.92	2.03		ug/L		106	70 - 130
Molinate	<0.096		1.92	2.08		ug/L		108	70 - 130
Naphthalene	<0.096		1.92	1.83		ug/L		95	70 - 130
Parathion	<0.096		1.92	2.08		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	<0.096		1.92	1.81		ug/L		94	70 - 130
Phenanthrene	<0.039		1.92	1.93		ug/L		100	70 - 130
Propachlor	<0.048		1.92	2.20		ug/L		114	70 - 130
Pyrene	<0.048		1.92	2.04		ug/L		106	70 - 130
Simazine	<0.048		1.92	2.21		ug/L		115	70 - 130
Terbacil	<0.096		1.92	2.19		ug/L		114	70 - 130
Terbutylazine	<0.096		1.92	2.26		ug/L		118	70 - 130
Thiobencarb	<0.096		1.92	2.15		ug/L		112	70 - 130
trans-Nonachlor	<0.048		1.92	1.81		ug/L		94	70 - 130
Trifluralin	<0.096		1.92	1.83		ug/L		95	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	91		70 - 130
Triphenylphosphate	108		70 - 130

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175898-I-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Sample	Sample	DU	DU	Unit	D	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
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

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175898-I-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 179597**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 179303**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
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
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	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.048		<0.048		ug/L		NC	20
Pyrene	<0.048		<0.048		ug/L		NC	20
Simazine	<0.048		<0.048		ug/L		NC	20
Terbacil	<0.096		<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	99		70 - 130
Perylene-d12	82		70 - 130
Triphenylphosphate	101		70 - 130

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

**Lab Sample ID: MB 570-639637/1-A**  
**Matrix: Water**  
**Analysis Batch: 644278**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

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	10/13/25 13:14	10/22/25 08:46	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	91		33 - 139	10/13/25 13:14	10/22/25 08:46	1
2-Fluorobiphenyl (Surr)	87		33 - 126	10/13/25 13:14	10/22/25 08:46	1
2-Fluorophenol (Surr)	61		12 - 120	10/13/25 13:14	10/22/25 08:46	1
Nitrobenzene-d5 (Surr)	89		36 - 120	10/13/25 13:14	10/22/25 08:46	1
Phenol-d6 (Surr)	37		10 - 120	10/13/25 13:14	10/22/25 08:46	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: MB 570-639637/1-A**  
**Matrix: Water**  
**Analysis Batch: 644278**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
<i>p</i> -Terphenyl-d14 (Surr)	99	MB MB	47 - 131	10/13/25 13:14	10/22/25 08:46	1

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

**Lab Sample ID: MB 570-639637/1-A**  
**Matrix: Water**  
**Analysis Batch: 640485**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>RL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
1-Methylnaphthalene	<0.20	MB MB	0.20	ug/L	D	10/13/25 13:14	10/15/25 00:02	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Acenaphthene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Acenaphthylene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Anthracene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Chrysene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Fluoranthene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Fluorene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Naphthalene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Phenanthrene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1
Pyrene	<0.20		0.20	ug/L		10/13/25 13:14	10/15/25 00:02	1

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
2,4,6-Tribromophenol (Surr)	65		28 - 127	10/13/25 13:14	10/15/25 00:02	1
2-Fluorobiphenyl (Surr)	63		31 - 120	10/13/25 13:14	10/15/25 00:02	1
2-Fluorophenol (Surr)	45		17 - 120	10/13/25 13:14	10/15/25 00:02	1
Nitrobenzene-d5 (Surr)	69		27 - 120	10/13/25 13:14	10/15/25 00:02	1
Phenol-d6 (Surr)	29		10 - 120	10/13/25 13:14	10/15/25 00:02	1
<i>p</i> -Terphenyl-d14 (Surr)	66		45 - 120	10/13/25 13:14	10/15/25 00:02	1

**Lab Sample ID: LCS 570-639637/2-A**  
**Matrix: Water**  
**Analysis Batch: 640485**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

<u>Analyte</u>	<u>Spike Added</u>	<u>LCS Result</u>	<u>LCS Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec Limits</u>
1-Methylnaphthalene	20.0	12.9		ug/L		65	47 - 120
2-Methylnaphthalene	20.0	12.8		ug/L		64	43 - 120
Acenaphthene	20.0	15.0		ug/L		75	60 - 132
Acenaphthylene	20.0	15.0		ug/L		75	54 - 126
Anthracene	20.0	14.9		ug/L		74	43 - 120
Benzo[a]anthracene	20.0	14.9		ug/L		74	42 - 133
Benzo[a]pyrene	20.0	15.5		ug/L		78	32 - 148

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: LCS 570-639637/2-A**  
**Matrix: Water**  
**Analysis Batch: 640485**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[b]fluoranthene	20.0	15.5		ug/L		77	42 - 140
Benzo[g,h,i]perylene	20.0	15.0		ug/L		75	1 - 195
Benzo[k]fluoranthene	20.0	15.2		ug/L		76	25 - 146
Chrysene	20.0	15.2		ug/L		76	44 - 140
Dibenz(a,h)anthracene	20.0	15.8		ug/L		79	1 - 200
Fluoranthene	20.0	16.0		ug/L		80	43 - 121
Fluorene	20.0	15.4		ug/L		77	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	15.3		ug/L		76	1 - 151
Naphthalene	20.0	12.5		ug/L		63	36 - 120
Phenanthrene	20.0	15.1		ug/L		75	65 - 120
Pyrene	20.0	15.2		ug/L		76	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	69		28 - 127
2-Fluorobiphenyl (Surr)	73		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	74		45 - 120

**Lab Sample ID: LCSD 570-639637/3-A**  
**Matrix: Water**  
**Analysis Batch: 640485**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	12.4		ug/L		62	47 - 120	4	20
2-Methylnaphthalene	20.0	12.3		ug/L		61	43 - 120	4	20
Acenaphthene	20.0	14.0		ug/L		70	60 - 132	7	29
Acenaphthylene	20.0	14.3		ug/L		72	54 - 126	5	45
Anthracene	20.0	14.0		ug/L		70	43 - 120	6	40
Benzo[a]anthracene	20.0	13.9		ug/L		70	42 - 133	6	32
Benzo[a]pyrene	20.0	14.4		ug/L		72	32 - 148	7	43
Benzo[b]fluoranthene	20.0	14.1		ug/L		71	42 - 140	9	43
Benzo[g,h,i]perylene	20.0	14.1		ug/L		71	1 - 195	6	61
Benzo[k]fluoranthene	20.0	14.4		ug/L		72	25 - 146	5	38
Chrysene	20.0	14.3		ug/L		72	44 - 140	6	53
Dibenz(a,h)anthracene	20.0	14.5		ug/L		73	1 - 200	8	75
Fluoranthene	20.0	15.0		ug/L		75	43 - 121	6	40
Fluorene	20.0	14.6		ug/L		73	70 - 120	5	23
Indeno[1,2,3-cd]pyrene	20.0	14.2		ug/L		71	1 - 151	7	60
Naphthalene	20.0	11.9		ug/L		60	36 - 120	5	39
Phenanthrene	20.0	14.0		ug/L		70	65 - 120	7	24
Pyrene	20.0	14.4		ug/L		72	70 - 120	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	67		28 - 127
2-Fluorobiphenyl (Surr)	69		31 - 120
2-Fluorophenol (Surr)	50		17 - 120

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: LCSD 570-639637/3-A**  
**Matrix: Water**  
**Analysis Batch: 640485**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 639637**

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	62		27 - 120
Phenol-d6 (Surr)	33		10 - 120
p-Terphenyl-d14 (Surr)	70		45 - 120

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

**Lab Sample ID: MB 570-642768/6**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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			10/19/25 12:46	1

  

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		38 - 134		10/19/25 12:46	1

**Lab Sample ID: LCS 570-642768/4**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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	370		ug/L		92	78 - 120

  

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		38 - 134

**Lab Sample ID: LCSD 570-642768/5**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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	374		ug/L		93	78 - 120	1	10

  

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		38 - 134

**Lab Sample ID: MRL 570-642768/3**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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	<7.9		ug/L		75	50 - 150

  

Surrogate	MRL %Recovery	MRL Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		38 - 134

# QC Sample Results

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-177173-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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	363		ug/L		91	68 - 122
<b>Surrogate</b>		<b>MS %Recovery</b>		<b>MS Qualifier</b>					<b>Limits</b>
4-Bromofluorobenzene (Surr)		91							38 - 134

**Lab Sample ID: 380-177173-B-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 642768**

**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	327		ug/L		82	68 - 122	10	18
<b>Surrogate</b>		<b>MSD %Recovery</b>		<b>MSD Qualifier</b>							
4-Bromofluorobenzene (Surr)		94									38 - 134

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

**Lab Sample ID: MB 570-639254/1-A**  
**Matrix: Water**  
**Analysis Batch: 644132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 639254**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		10/12/25 11:08	10/21/25 23:01	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/12/25 11:08	10/21/25 23:01	1
C8-C18	<25		25	ug/L		10/12/25 11:08	10/21/25 23:01	1
<b>Surrogate</b>		<b>MB %Recovery</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)		117				10/12/25 11:08	10/21/25 23:01	1

**Lab Sample ID: LCS 570-639254/2-A**  
**Matrix: Water**  
**Analysis Batch: 644132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 639254**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1900		ug/L		119	56 - 127
<b>Surrogate</b>		<b>LCS %Recovery</b>					<b>Limits</b>
n-Octacosane (Surr)		119					60 - 130

**Lab Sample ID: LCSD 570-639254/3-A**  
**Matrix: Water**  
**Analysis Batch: 644132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 639254**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1810		ug/L		113	56 - 127	5	23

# QC Sample Results

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: LCSD 570-639254/3-A**  
**Matrix: Water**  
**Analysis Batch: 644132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 639254**

<i>Surrogate</i>	<i>LCSD %Recovery</i>	<i>LCSD Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	111		60 - 130

**Lab Sample ID: MRL 570-639254/4-A**  
**Matrix: Water**  
**Analysis Batch: 644132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 639254**

<i>Analyte</i>	<i>Spike Added</i>	<i>MRL Result</i>	<i>MRL Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
C10-C28	0.0200	0.0315	^3+	mg/L		158	50 - 150

<i>Surrogate</i>	<i>MRL %Recovery</i>	<i>MRL Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	118		60 - 130

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# QC Association Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## GC/MS Semi VOA

### Prep Batch: 179303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	525.2	
MB 380-179303/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-179303/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-179303/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-175895-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	
380-175898-I-1-A DU	Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 179597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	179303
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	525.2	179303
MB 380-179303/20-A	Method Blank	Total/NA	Water	525.2	179303
LCS 380-179303/22-A	Lab Control Sample	Total/NA	Water	525.2	179303
MRL 380-179303/21-A	Lab Control Sample	Total/NA	Water	525.2	179303
380-175895-1 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	179303
380-175898-I-1-A DU	Duplicate	Total/NA	Water	525.2	179303

### Prep Batch: 639637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1	
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	625.1	
MB 570-639637/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-639637/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-639637/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

### Analysis Batch: 640485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-639637/1-A	Method Blank	Total/NA	Water	625.1 SIM	639637
LCS 570-639637/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	639637
LCSD 570-639637/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	639637

### Analysis Batch: 644216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1 SIM	639637
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	625.1 SIM	639637

### Analysis Batch: 644278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1	639637
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1	639637
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	625.1	639637
MB 570-639637/1-A	Method Blank	Total/NA	Water	625.1	639637

## GC VOA

### Analysis Batch: 642768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B GRO LL	
380-175895-2	TB: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B GRO LL	
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	8015B GRO LL	

# QC Association Summary

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

Job ID: 380-175895-1  
 SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## GC VOA (Continued)

### Analysis Batch: 642768 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-4	TB:MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	8015B GRO LL	
MB 570-642768/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-642768/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-642768/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-642768/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-177173-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-177173-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

## GC Semi VOA

### Prep Batch: 639254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	3510C	
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	3510C	
MB 570-639254/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-639254/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-639254/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-639254/4-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 644132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B	639254
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Total/NA	Drinking Water	8015B	639254
MB 570-639254/1-A	Method Blank	Total/NA	Water	8015B	639254
LCS 570-639254/2-A	Lab Control Sample	Total/NA	Water	8015B	639254
LCSD 570-639254/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	639254
MRL 570-639254/4-A	Lab Control Sample	Total/NA	Water	8015B	639254

# Lab Chronicle

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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

**Lab Sample ID: 380-175895-1**

**Date Collected: 10/07/25 10:45**

**Matrix: Drinking Water**

**Date Received: 10/09/25 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			179303	OTM3	EA POM	10/13/25 08:31
Total/NA	Analysis	525.2		1	179597	Q8LA	EA POM	10/14/25 12:42
Total/NA	Prep	625.1			639637	S4EA	EET CAL 4	10/13/25 13:14
Total/NA	Analysis	625.1		1	644278	PQS1	EET CAL 4	10/22/25 11:13
Total/NA	Prep	625.1			639637	S4EA	EET CAL 4	10/13/25 13:14
Total/NA	Analysis	625.1		1	644278	PQS1	EET CAL 4	10/22/25 14:04
Total/NA	Prep	625.1			639637	S4EA	EET CAL 4	10/13/25 13:14
Total/NA	Analysis	625.1 SIM		1	644216	PQS1	EET CAL 4	10/22/25 11:27
Total/NA	Analysis	8015B GRO LL		1	642768	YD9V	EET CAL 4	10/19/25 15:32
Total/NA	Prep	3510C			639254	TVD6	EET CAL 4	10/12/25 11:08
Total/NA	Analysis	8015B		1	644132	H6FE	EET CAL 4	10/22/25 00:49

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

**Lab Sample ID: 380-175895-2**

**Date Collected: 10/07/25 10:45**

**Matrix: Drinking Water**

**Date Received: 10/09/25 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	642768	YD9V	EET CAL 4	10/19/25 20:21

**Client Sample ID: MOANALUA WELLS P1 (331-223-TP202)**

**Lab Sample ID: 380-175895-3**

**Date Collected: 10/07/25 13:00**

**Matrix: Drinking Water**

**Date Received: 10/09/25 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			179303	OTM3	EA POM	10/13/25 08:31
Total/NA	Analysis	525.2		1	179597	Q8LA	EA POM	10/14/25 13:42
Total/NA	Prep	625.1			639637	S4EA	EET CAL 4	10/13/25 13:14
Total/NA	Analysis	625.1		1	644278	PQS1	EET CAL 4	10/22/25 11:37
Total/NA	Prep	625.1			639637	S4EA	EET CAL 4	10/13/25 13:14
Total/NA	Analysis	625.1 SIM		1	644216	PQS1	EET CAL 4	10/22/25 10:00
Total/NA	Analysis	8015B GRO LL		1	642768	YD9V	EET CAL 4	10/19/25 15:52
Total/NA	Prep	3510C			639254	TVD6	EET CAL 4	10/12/25 11:08
Total/NA	Analysis	8015B		1	644132	H6FE	EET CAL 4	10/22/25 01:10

**Client Sample ID: TB:MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-175895-4**

**Date Collected: 10/07/25 13:00**

**Matrix: Drinking Water**

**Date Received: 10/09/25 10:20**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	642768	YD9V	EET CAL 4	10/19/25 20:42

# Lab Chronicle

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**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

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# Accreditation/Certification Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## 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
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25

Eurofins Eaton Analytical Pomona

# Accreditation/Certification Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

## 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
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
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	10-11-26

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# Method Summary

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

Job ID: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

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: 380-175895-1  
SDG: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-175895-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	10/07/25 10:45	10/09/25 10:20	HI0000331
380-175895-2	TB: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	10/07/25 10:45	10/09/25 10:20	
380-175895-3	MOANALUA WELLS P1 (331-223-TP202)	Drinking Water	10/07/25 13:00	10/09/25 10:20	HI0000331
380-175895-4	TB:MOANALUA WELLS (331-223-TP202)	Drinking Water	10/07/25 13:00	10/09/25 10:20	

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# Chain of Custody Record



<b>Client Information</b> Client Contact: Mr Kirk Iwamoto City & County of Honolulu Address: 630 South Beretania Street Chemistry Lab Honolulu HI, 96843 Phone: 808-748-5840 (Tel) Email: kiwamoto@hbws.org Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill Site: Hawaii		Lab P#: Arada, Rachelle E-Mail: Rachelle.Arada@et.eurofinsus.com PWSID:		Sampler: Jason Rakofsky Phone: +1 808 748 5840		Carrier Tracking No(s): State of Origin: Job #:		COC No: 380-28005-27571 Page: Page 1 of 2			
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: C20525101 exp 05312023 WO #:		Analysis Requested 633 - All Analytes 637.1_DW_PREC - 637.1 Full List 626.2_PREC - (MOD) 626plus Plus Tics 6016B_GRO_LL_CS - HNL Ranges: C10-C24/C24-C36/C8-C18 6016B_GRO_LL - (MOD) GRO 626.1_626.4_SIM		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> R 4 5 4 5 RA Q OA Y I 4 5 4 5		Total Number of Containers Special Instructions/Notes:		Preservation Codes: R - NaTheSO4 RA - NaThe/HCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate Other:			
Sample Identification Halawa Wells Units 1 & 2 P1 Halawa Wells Units 1 & 2 P1 (Matrix Spike) 10/7 Halawa Wells Units 1 & 2 P1 (Matrix Spike Duplicate) JB TB: Halawa Wells Units 1 & 2 P1 Moanalua Wells P1 Moanalua Wells (Matrix Spike) 10/7 Moanalua Wells (Matrix Spike Duplicate)		Sample Date 7-Oct-2025 7-Oct-2025 7-Oct-2025 7-Oct-2025		Sample Time 1045 1045 1300 1300		Sample Type (C=Comp, G=grab) G G G G		Matrix (Inorganic, Semimetal, Organic) Water Water Water Water		Preservation Codes: 4 5 4 5 X X X X X X X X 2 4 10 2 2 2 3 2 2 2 2	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months		Special Instructions/QC Requirements: 8183 8800 4852		Method of Shipment: FED X			
Empty Kit Relinquished by:		Date:		Time:		Received by: S MACICZ Date/Time: 10/19/25 10:20A Company: CEAP		Received by:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 16.30A / 2.3 - 0.05 - 2.3 6.7		Company:		Date/Time:			





## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-175895-1

SDG Number: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Login Number: 175895**

**List Source: Eurofins Eaton Analytical Pomona**

**List Number: 1**

**Creator: Sanchez, Joseph G**

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



# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-175895-1

SDG Number: Weekly: Halawa Wells Units 1&2 P1, Moanalua Wells

**Login Number: 175895**

**List Source: Eurofins Calscience**

**List Number: 2**

**List Creation: 10/10/25 07:39 PM**

**Creator: Khana, Piyush**

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	2.3
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.	False	