

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Mr. Erwin Kawata  
City & County of Honolulu  
630 South Beretania Street  
Public Service Bldg. Room 310  
Honolulu, Hawaii 96843

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## JOB DESCRIPTION

RED-HILL  
Weekly: Halawa Wells P1 (MS/MSD)

## JOB NUMBER

380-205656-1

# Eurofins 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 Drinking Water and Wastewater West, 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



Authorized for release by  
Maria Lopez, Project Manager  
[Maria.Lopez@et.eurofinsus.com](mailto:Maria.Lopez@et.eurofinsus.com)  
(626)386-1100

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# Definitions/Glossary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

## 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: 380-205656-1

**Job ID: 380-205656-1**

**Eurofins Pomona**

## Job Narrative 380-205656-1

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 4/1/2026 10:10 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 2.2°C.

### GC/MS Semi VOA

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

### Gasoline Range Organics

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

### Diesel Range Organics

Method 8015B: The method reporting limit check (MRL) for preparation batch 570-717817 and analytical batch 570-720380 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: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-205656-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.037		0.0098	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.014		0.0098	ug/L	1		525.2	Total/NA

**Client Sample ID: TB: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-2**

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: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-1**

Date Collected: 03/30/26 10:36

Matrix: Drinking Water

Date Received: 04/01/26 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2,4'-DDD	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2,4'-DDE	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2,4'-DDT	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
4,4'-DDD	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
4,4'-DDE	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
4,4'-DDT	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Acenaphthene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Acenaphthylene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Acetochlor	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Alachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
alpha-BHC	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
alpha-Chlordane	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Anthracene	<0.020		0.020	ug/L		04/02/26 09:12	04/05/26 16:35	1
Atrazine	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/02/26 09:12	04/05/26 16:35	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/02/26 09:12	04/05/26 16:35	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/02/26 09:12	04/05/26 16:35	1
beta-BHC	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/02/26 09:12	04/05/26 16:35	1
Bromacil	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Butachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 16:35	1
Chlorobenzilate	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Chloroneb	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Chlorpyrifos	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Chrysene	<0.020		0.020	ug/L		04/02/26 09:12	04/05/26 16:35	1
delta-BHC	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/02/26 09:12	04/05/26 16:35	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
<b>Dieldrin</b>	<b>0.037</b>		0.0098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Diethylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 16:35	1
Dimethylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 16:35	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/02/26 09:12	04/05/26 16:35	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Endrin	<0.0098		0.0098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Endrin aldehyde	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
EPTC	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Fluoranthene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1

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# Client Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-1**

Date Collected: 03/30/26 10:36

Matrix: Drinking Water

Date Received: 04/01/26 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
gamma-Chlordane	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Heptachlor	<0.0098		0.0098	ug/L		04/02/26 09:12	04/05/26 16:35	1
<b>Heptachlor epoxide (isomer B)</b>	<b>0.014</b>		0.0098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Isophorone	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Lindane	<0.0098		0.0098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Malathion	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Methoxychlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Metolachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Molinate	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Naphthalene	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Parathion	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Phenanthrene	<0.039		0.039	ug/L		04/02/26 09:12	04/05/26 16:35	1
Propachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Pyrene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Simazine	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Terbacil	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Terbutylazine	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Thiobencarb	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/02/26 09:12	04/05/26 16:35	1
trans-Nonachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 16:35	1
Trifluralin	<0.098		0.098	ug/L		04/02/26 09:12	04/05/26 16:35	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/02/26 09:12	04/05/26 16:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	04/02/26 09:12	04/05/26 16:35	1
Perylene-d12	94		70 - 130	04/02/26 09:12	04/05/26 16:35	1
Triphenylphosphate	101		70 - 130	04/02/26 09:12	04/05/26 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
2-Methylnaphthalene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Acenaphthene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Acenaphthylene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Anthracene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Chrysene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Fluoranthene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1

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# Client Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-1**

Date Collected: 03/30/26 10:36

Matrix: Drinking Water

Date Received: 04/01/26 10:10

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
Fluorene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Naphthalene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Phenanthrene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1
Pyrene	<0.19		0.19	ug/L		04/02/26 09:44	04/05/26 05:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		28 - 127	04/02/26 09:44	04/05/26 05:06	1
2-Fluorobiphenyl (Surr)	85		31 - 120	04/02/26 09:44	04/05/26 05:06	1
2-Fluorophenol (Surr)	52		17 - 120	04/02/26 09:44	04/05/26 05:06	1
Nitrobenzene-d5 (Surr)	87		27 - 120	04/02/26 09:44	04/05/26 05:06	1
Phenol-d6 (Surr)	31		10 - 120	04/02/26 09:44	04/05/26 05:06	1
p-Terphenyl-d14 (Surr)	82		45 - 120	04/02/26 09:44	04/05/26 05:06	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/02/26 09:44	04/05/26 10:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	82		33 - 139	04/02/26 09:44	04/05/26 10:30	1
2-Fluorobiphenyl (Surr)	87		33 - 126	04/02/26 09:44	04/05/26 10:30	1
2-Fluorophenol (Surr)	54		12 - 120	04/02/26 09:44	04/05/26 10:30	1
Nitrobenzene-d5 (Surr)	88		36 - 120	04/02/26 09:44	04/05/26 10:30	1
Phenol-d6 (Surr)	30		10 - 120	04/02/26 09:44	04/05/26 10:30	1
p-Terphenyl-d14 (Surr)	83		47 - 131	04/02/26 09:44	04/05/26 10:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/07/26 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		04/07/26 16:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<26		26	ug/L		04/02/26 08:46	04/07/26 01:11	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		04/02/26 08:46	04/07/26 01:11	1
C8-C18	<26		26	ug/L		04/02/26 08:46	04/07/26 01:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	105		60 - 130	04/02/26 08:46	04/07/26 01:11	1

**Client Sample ID: TB: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-2**

Date Collected: 03/30/26 10:36

Matrix: Water

Date Received: 04/01/26 10:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/07/26 17:59	1

# Client Sample Results

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: TB: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-2**

Date Collected: 03/30/26 10:36

Matrix: Water

Date Received: 04/01/26 10:10

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
4-Bromofluorobenzene (Surr)	93		38 - 134		04/07/26 17:59	1

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

# Action Limit Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-1**

**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	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.014		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

# Surrogate Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Matrix: Drinking Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-205656-1	HALAWA WELLS P1 (331-023-WL0)	98	94	101

**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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-205433-I-1-A MS	Matrix Spike	96	96	108
380-205433-J-1-A MSD	Matrix Spike Duplicate	98	96	103
LCS 380-217404/23-A	Lab Control Sample	99	97	103
MB 380-217404/21-A	Method Blank	97	83	95
MRL 380-217404/22-A	Lab Control Sample	96	86	99

**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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-205656-1	HALAWA WELLS P1 (331-023-WL0)	82	87	54	88	30	83

**Surrogate Legend**

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

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
MB 570-718453/1-A	Method Blank	86	88	62	93	38	93

**Surrogate Legend**

- TBP = 2,4,6-Tribromophenol (Surr)
- FBP = 2-Fluorobiphenyl (Surr)
- 2FP = 2-Fluorophenol (Surr)
- NBZ = Nitrobenzene-d5 (Surr)

# Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-205656-1

Project/Site: RED-HILL

SDG: Weekly: Halawa Wells P1 (MS/MSD)

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)
380-205656-1	HALAWA WELLS P1 (331-023-WL0)	86	85	52	87	31	82
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	85	84	61	73	39	93
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	85	84	61	74	39	92

**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 570-718453/2-A	Lab Control Sample	85	83	71	78	46	94
LCS 570-718453/3-A	Lab Control Sample Dup	98	95	72	83	45	113
MB 570-718453/1-A	Method Blank	107	105	78	118	50	105

**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)
380-205656-1	HALAWA WELLS P1 (331-023-WL0)	89
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	89
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	97

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

## 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)
380-205656-2	TB: HALAWA WELLS P1 (331-023-1	93
LCS 570-720590/5	Lab Control Sample	96
LCS 570-720590/6	Lab Control Sample Dup	100
MB 570-720590/8	Method Blank	93
MRL 570-720590/9	Lab Control Sample	97

#### 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)
380-205656-1	HALAWA WELLS P1 (331-023-WL0	105
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	105
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	105

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-205433-C-1-A MS	Matrix Spike	109
380-205433-C-1-B MSD	Matrix Spike Duplicate	103
LCS 570-717817/2-A	Lab Control Sample	105
LCS 570-717817/3-A	Lab Control Sample Dup	102
MB 570-717817/1-A	Method Blank	102
MRL 570-717817/4-A	Lab Control Sample	106

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: MB 380-217404/21-A**  
**Matrix: Water**  
**Analysis Batch: 217868**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 217404**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2,4'-DDD	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2,4'-DDE	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2,4'-DDT	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
2-Methylnaphthalene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
4,4'-DDD	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
4,4'-DDE	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
4,4'-DDT	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Acenaphthene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Acenaphthylene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Acetochlor	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Alachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
alpha-BHC	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
alpha-Chlordane	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Anthracene	<0.019		0.019	ug/L		04/02/26 09:12	04/05/26 08:11	1
Atrazine	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/02/26 09:12	04/05/26 08:11	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/02/26 09:12	04/05/26 08:11	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/02/26 09:12	04/05/26 08:11	1
beta-BHC	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/02/26 09:12	04/05/26 08:11	1
Bromacil	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Butachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 08:11	1
Chlorobenzilate	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Chloroneb	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Chlorpyrifos	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Chrysene	<0.019		0.019	ug/L		04/02/26 09:12	04/05/26 08:11	1
delta-BHC	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		04/02/26 09:12	04/05/26 08:11	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Dieldrin	<0.0097		0.0097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Diethylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 08:11	1
Dimethylphthalate	<0.49		0.49	ug/L		04/02/26 09:12	04/05/26 08:11	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		04/02/26 09:12	04/05/26 08:11	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Endosulfan sulfate	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Endrin	<0.0097		0.0097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Endrin aldehyde	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
EPTC	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: MB 380-217404/21-A**  
**Matrix: Water**  
**Analysis Batch: 217868**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 217404**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Fluorene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
gamma-Chlordane	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Heptachlor	<0.0097		0.0097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Isophorone	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Lindane	<0.0097		0.0097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Malathion	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Methoxychlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Metolachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Molinate	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Naphthalene	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Parathion	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Phenanthrene	<0.039		0.039	ug/L		04/02/26 09:12	04/05/26 08:11	1
Propachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Pyrene	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Simazine	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Terbacil	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Terbutylazine	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Thiobencarb	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/02/26 09:12	04/05/26 08:11	1
trans-Nonachlor	<0.049		0.049	ug/L		04/02/26 09:12	04/05/26 08:11	1
Trifluralin	<0.097		0.097	ug/L		04/02/26 09:12	04/05/26 08:11	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Undecane	5.32	T J N	ug/L		3.13	1120-21-4	04/02/26 09:12	04/05/26 08:11	1
9-Octadecenamamide, (Z)-	0.739	T J N	ug/L		7.89	301-02-0	04/02/26 09:12	04/05/26 08:11	1
13-Docosenamamide, (Z)-	0.692	T J N	ug/L		10.40	112-84-5	04/02/26 09:12	04/05/26 08:11	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	97		70 - 130	04/02/26 09:12	04/05/26 08:11	1
Perylene-d12	83		70 - 130	04/02/26 09:12	04/05/26 08:11	1
Triphenylphosphate	95		70 - 130	04/02/26 09:12	04/05/26 08:11	1

**Lab Sample ID: LCS 380-217404/23-A**  
**Matrix: Water**  
**Analysis Batch: 217868**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 217404**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	1.95	1.92		ug/L		99	70 - 130
2,4'-DDD	1.95	2.05		ug/L		105	70 - 130
2,4'-DDE	1.95	1.97		ug/L		101	70 - 130
2,4'-DDT	1.95	2.00		ug/L		103	70 - 130
2,4-Dinitrotoluene	1.95	1.97		ug/L		101	70 - 130

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: LCS 380-217404/23-A

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
2,6-Dinitrotoluene	1.95	1.98		ug/L		102	70 - 130
2-Methylnaphthalene	1.95	1.96		ug/L		101	70 - 130
4,4'-DDD	1.95	2.19		ug/L		112	70 - 130
4,4'-DDE	1.95	1.88		ug/L		97	70 - 130
4,4'-DDT	1.95	2.07		ug/L		106	70 - 130
Acenaphthene	1.95	2.01		ug/L		103	70 - 130
Acenaphthylene	1.95	2.06		ug/L		106	70 - 130
Acetochlor	1.95	2.06		ug/L		106	70 - 130
Alachlor	1.95	2.01		ug/L		103	70 - 130
alpha-BHC	1.95	2.10		ug/L		108	70 - 130
alpha-Chlordane	1.95	2.15		ug/L		110	70 - 130
Anthracene	1.95	1.94		ug/L		100	70 - 130
Atrazine	1.95	2.10		ug/L		108	70 - 130
Benz(a)anthracene	1.95	2.17		ug/L		111	70 - 130
Benzo[a]pyrene	1.95	2.04		ug/L		105	70 - 130
Benzo[b]fluoranthene	1.95	2.12		ug/L		109	70 - 130
Benzo[g,h,i]perylene	1.95	1.99		ug/L		102	70 - 130
Benzo[k]fluoranthene	1.95	2.00		ug/L		103	70 - 130
beta-BHC	1.95	2.16		ug/L		111	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	2.00		ug/L		103	70 - 130
Bromacil	1.95	1.82		ug/L		94	70 - 130
Butachlor	1.95	2.06		ug/L		106	70 - 130
Butylbenzylphthalate	1.95	2.10		ug/L		108	70 - 130
Chlorobenzilate	1.95	2.07		ug/L		106	70 - 130
Chloroneb	1.95	2.14		ug/L		110	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	2.12		ug/L		109	70 - 130
Chlorpyrifos	1.95	2.11		ug/L		108	70 - 130
Chrysene	1.95	2.14		ug/L		110	70 - 130
delta-BHC	1.95	2.04		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	1.95	2.09		ug/L		107	70 - 130
Dibenz(a,h)anthracene	1.95	1.99		ug/L		102	70 - 130
Diclorvos (DDVP)	1.95	2.12		ug/L		109	70 - 130
Dieldrin	1.95	2.20		ug/L		113	70 - 130
Diethylphthalate	1.95	2.17		ug/L		111	70 - 130
Dimethylphthalate	1.95	2.09		ug/L		107	70 - 130
Di-n-butyl phthalate	3.89	4.25		ug/L		109	70 - 130
Di-n-octyl phthalate	1.95	1.90		ug/L		98	70 - 130
Endosulfan I (Alpha)	1.95	2.19		ug/L		113	70 - 130
Endosulfan II (Beta)	1.95	2.13		ug/L		109	70 - 130
Endosulfan sulfate	1.95	2.04		ug/L		105	70 - 130
Endrin	1.95	2.28		ug/L		117	70 - 130
Endrin aldehyde	1.95	2.02		ug/L		104	60 - 130
EPTC	1.95	2.13		ug/L		109	70 - 130
Fluoranthene	1.95	2.03		ug/L		104	70 - 130
Fluorene	1.95	2.12		ug/L		109	70 - 130
gamma-Chlordane	1.95	2.27		ug/L		116	70 - 130
Heptachlor	1.95	2.12		ug/L		109	70 - 130
Heptachlor epoxide (isomer B)	1.95	2.05		ug/L		105	70 - 130
Hexachlorobenzene	1.95	1.98		ug/L		102	70 - 130

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# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: LCS 380-217404/23-A

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	1.95	1.87		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	2.03		ug/L		104	70 - 130
Isophorone	1.95	2.03		ug/L		104	70 - 130
Lindane	1.95	2.20		ug/L		113	70 - 130
Malathion	1.95	2.03		ug/L		104	70 - 130
Methoxychlor	1.95	2.03		ug/L		104	70 - 130
Metolachlor	1.95	2.04		ug/L		105	70 - 130
Molinate	1.95	2.17		ug/L		112	70 - 130
Naphthalene	1.95	1.93		ug/L		99	70 - 130
Parathion	1.95	2.17		ug/L		111	70 - 130
Pendimethalin (Penoxaline)	1.95	2.04		ug/L		105	70 - 130
Phenanthrene	1.95	2.05		ug/L		105	70 - 130
Propachlor	1.95	2.12		ug/L		109	70 - 130
Pyrene	1.95	2.00		ug/L		103	70 - 130
Simazine	1.95	2.03		ug/L		104	70 - 130
Terbacil	1.95	1.92		ug/L		98	70 - 130
Terbutylazine	1.95	2.11		ug/L		108	70 - 130
Thiobencarb	1.95	2.03		ug/L		104	70 - 130
trans-Nonachlor	1.95	1.91		ug/L		98	70 - 130
Trifluralin	1.95	2.01		ug/L		103	70 - 130

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

Lab Sample ID: MRL 380-217404/22-A

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0974	0.105		ug/L		108	50 - 150
2,4'-DDD	0.0974	0.0940	J	ug/L		97	50 - 150
2,4'-DDE	0.0974	0.107		ug/L		110	50 - 150
2,4'-DDT	0.0974	0.108		ug/L		111	50 - 150
2,4-Dinitrotoluene	0.0974	0.101		ug/L		104	50 - 150
2,6-Dinitrotoluene	0.0974	0.119		ug/L		122	50 - 150
2-Methylnaphthalene	0.0974	0.102		ug/L		104	50 - 150
4,4'-DDD	0.0974	0.107		ug/L		110	50 - 150
4,4'-DDE	0.0974	0.102		ug/L		104	50 - 150
4,4'-DDT	0.0974	0.114		ug/L		117	50 - 150
Acenaphthene	0.0974	0.0914	J	ug/L		94	50 - 150
Acenaphthylene	0.0974	0.0904	J	ug/L		93	50 - 150
Acetochlor	0.0974	0.111		ug/L		114	50 - 150
Alachlor	0.0487	0.0598		ug/L		123	50 - 150
alpha-BHC	0.0974	0.0985		ug/L		101	50 - 150
alpha-Chlordane	0.0243	<0.028		ug/L		110	50 - 150
Anthracene	0.0195	0.0260		ug/L		133	50 - 150

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: MRL 380-217404/22-A

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Atrazine	0.0487	0.0648		ug/L		133	50 - 150
Benz(a)anthracene	0.0487	0.0511		ug/L		105	50 - 150
Benzo[a]pyrene	0.0195	0.0195		ug/L		100	50 - 150
Benzo[b]fluoranthene	0.0195	0.0231		ug/L		119	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0540		ug/L		111	50 - 150
Benzo[k]fluoranthene	0.0195	0.0228		ug/L		117	50 - 150
beta-BHC	0.0974	0.102		ug/L		104	50 - 150
Bis(2-ethylhexyl) phthalate	0.584	0.567	J	ug/L		97	50 - 150
Bromacil	0.0974	0.104		ug/L		107	50 - 150
Butachlor	0.0487	0.0666		ug/L		137	50 - 150
Butylbenzylphthalate	0.487	0.553		ug/L		113	50 - 150
Chlorobenzilate	0.0974	0.106		ug/L		109	50 - 150
Chloroneb	0.0974	0.0985		ug/L		101	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0974	0.100		ug/L		103	50 - 150
Chlorpyrifos	0.0487	0.0588		ug/L		121	50 - 150
Chrysene	0.0195	0.0219		ug/L		113	50 - 150
delta-BHC	0.0974	0.104		ug/L		106	50 - 150
Di(2-ethylhexyl)adipate	0.584	0.632		ug/L		108	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0543		ug/L		112	50 - 150
Diclorvos (DDVP)	0.0487	0.0500		ug/L		103	50 - 150
Dieldrin	0.00974	0.0100		ug/L		103	50 - 150
Diethylphthalate	0.487	0.533		ug/L		109	50 - 150
Dimethylphthalate	0.487	0.508		ug/L		104	50 - 150
Di-n-butyl phthalate	0.487	0.585	J	ug/L		120	49 - 243
Di-n-octyl phthalate	0.0974	0.0887	J	ug/L		91	50 - 150
Endosulfan I (Alpha)	0.0974	0.0943	J	ug/L		97	50 - 150
Endosulfan II (Beta)	0.0974	0.0971		ug/L		100	50 - 150
Endosulfan sulfate	0.0974	0.104		ug/L		107	50 - 150
Endrin	0.00974	0.0139		ug/L		143	50 - 150
Endrin aldehyde	0.0974	0.108		ug/L		111	50 - 150
EPTC	0.0974	0.0928	J	ug/L		95	50 - 150
Fluoranthene	0.0974	0.101		ug/L		103	50 - 150
Fluorene	0.0487	0.0501		ug/L		103	50 - 150
gamma-Chlordane	0.0243	0.0278	J	ug/L		114	50 - 150
Heptachlor	0.00974	0.00977		ug/L		100	50 - 150
Heptachlor epoxide (isomer B)	0.00974	0.0142		ug/L		145	50 - 150
Hexachlorobenzene	0.0487	0.0519		ug/L		107	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0454	J	ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0557		ug/L		114	50 - 150
Isophorone	0.0974	0.112		ug/L		115	50 - 150
Lindane	0.00974	0.0130		ug/L		133	50 - 150
Malathion	0.0974	0.101		ug/L		104	50 - 150
Methoxychlor	0.0487	0.0672		ug/L		138	50 - 150
Metolachlor	0.0487	0.0625		ug/L		128	50 - 150
Molinate	0.0974	0.0985		ug/L		101	50 - 150
Naphthalene	0.0974	0.0908	J	ug/L		93	50 - 150
Parathion	0.0974	0.0924	J	ug/L		95	50 - 150
Pendimethalin (Penoxaline)	0.0974	0.0978		ug/L		100	50 - 150
Phenanthrene	0.0389	0.0418		ug/L		107	50 - 150

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# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: MRL 380-217404/22-A

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Propachlor	0.0487	0.0592		ug/L		122	50 - 150
Pyrene	0.0487	0.0601		ug/L		123	50 - 150
Simazine	0.0487	0.0602		ug/L		124	50 - 150
Terbacil	0.0974	0.0984		ug/L		101	50 - 150
Terbutylazine	0.0974	0.103		ug/L		106	50 - 150
Thiobencarb	0.0974	0.108		ug/L		111	50 - 150
trans-Nonachlor	0.0243	0.0287	J	ug/L		118	50 - 150
Trifluralin	0.0974	0.0993		ug/L		102	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	86		70 - 130
Triphenylphosphate	99		70 - 130

Lab Sample ID: 380-205433-I-1-A MS

Matrix: Water

Analysis Batch: 217868

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 217404

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.10		1.96	1.93		ug/L		99	70 - 130
2,4'-DDD	<0.10		1.96	2.09		ug/L		107	70 - 130
2,4'-DDE	<0.10		1.96	1.96		ug/L		100	70 - 130
2,4'-DDT	<0.10		1.96	1.89		ug/L		97	70 - 130
2,4-Dinitrotoluene	<0.10		1.96	2.13		ug/L		109	70 - 130
2,6-Dinitrotoluene	<0.10		1.96	2.10		ug/L		107	70 - 130
2-Methylnaphthalene	<0.10		1.96	1.93		ug/L		99	70 - 130
4,4'-DDD	<0.10		1.96	2.10		ug/L		108	70 - 130
4,4'-DDE	<0.10		1.96	1.84		ug/L		94	70 - 130
4,4'-DDT	<0.10		1.96	1.98		ug/L		101	70 - 130
Acenaphthene	<0.10		1.96	2.00		ug/L		102	70 - 130
Acenaphthylene	<0.10		1.96	2.07		ug/L		106	70 - 130
Acetochlor	<0.10		1.96	2.07		ug/L		106	70 - 130
Alachlor	<0.050		1.96	2.10		ug/L		107	70 - 130
alpha-BHC	<0.10		1.96	2.18		ug/L		112	70 - 130
alpha-Chlordane	<0.050		1.96	2.25		ug/L		115	70 - 130
Anthracene	<0.020	F1	1.96	1.17	F1	ug/L		60	70 - 130
Atrazine	<0.050		1.96	2.28		ug/L		116	70 - 130
Benz(a)anthracene	<0.050		1.96	2.04		ug/L		104	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.82		ug/L		93	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	2.10		ug/L		107	70 - 130
Benzo[g,h,i]perylene	<0.050		1.96	1.93		ug/L		98	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	1.99		ug/L		102	70 - 130
beta-BHC	<0.10		1.96	2.39		ug/L		122	70 - 130
Bis(2-ethylhexyl) phthalate	<0.60		1.96	1.81		ug/L		93	70 - 130
Bromacil	<0.10		1.96	1.95		ug/L		100	70 - 130
Butachlor	<0.050		1.96	2.13		ug/L		109	70 - 130
Butylbenzylphthalate	<0.50		1.96	2.14		ug/L		110	70 - 130
Chlorobenzilate	<0.10		1.96	2.13		ug/L		109	70 - 130

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: 380-205433-I-1-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 217868

Prep Batch: 217404

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloroneb	<0.10		1.96	2.17		ug/L		111	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.10		1.96	2.14		ug/L		109	70 - 130
Chlorpyrifos	<0.050		1.96	2.10		ug/L		108	70 - 130
Chrysene	<0.020		1.96	2.21		ug/L		113	70 - 130
delta-BHC	<0.10		1.96	2.11		ug/L		108	70 - 130
Di(2-ethylhexyl)adipate	<0.60		1.96	1.94		ug/L		99	70 - 130
Dibenz(a,h)anthracene	<0.050		1.96	1.89		ug/L		96	70 - 130
Diclorvos (DDVP)	<0.050		1.96	2.11		ug/L		108	70 - 130
Dieldrin	<0.010		1.96	2.24		ug/L		115	70 - 130
Diethylphthalate	<0.50		1.96	2.28		ug/L		116	70 - 130
Dimethylphthalate	<0.50		1.96	2.12		ug/L		109	70 - 130
Di-n-butyl phthalate	<1.0		3.91	4.51		ug/L		115	70 - 130
Di-n-octyl phthalate	<0.10		1.96	1.71		ug/L		87	70 - 130
Endosulfan I (Alpha)	<0.10		1.96	2.24		ug/L		115	70 - 130
Endosulfan II (Beta)	<0.10		1.96	2.21		ug/L		113	70 - 130
Endosulfan sulfate	<0.10		1.96	2.11		ug/L		108	70 - 130
Endrin	<0.010		1.96	2.33		ug/L		119	70 - 130
Endrin aldehyde	<0.10		1.96	1.75		ug/L		89	60 - 130
EPTC	<0.10		1.96	2.08		ug/L		107	70 - 130
Fluoranthene	<0.10		1.96	2.07		ug/L		106	70 - 130
Fluorene	<0.050		1.96	2.17		ug/L		111	70 - 130
gamma-Chlordane	<0.050		1.96	2.25		ug/L		115	70 - 130
Heptachlor	<0.010		1.96	2.11		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.010		1.96	2.08		ug/L		106	70 - 130
Hexachlorobenzene	<0.050		1.96	2.10		ug/L		107	70 - 130
Hexachlorocyclopentadiene	<0.050		1.96	1.80		ug/L		92	70 - 130
Indeno[1,2,3-cd]pyrene	<0.050		1.96	1.92		ug/L		98	70 - 130
Isophorone	<0.10		1.96	1.97		ug/L		101	70 - 130
Lindane	<0.010		1.96	2.38		ug/L		122	70 - 130
Malathion	<0.10		1.96	2.07		ug/L		106	70 - 130
Methoxychlor	<0.050		1.96	2.04		ug/L		105	70 - 130
Metolachlor	<0.050		1.96	2.09		ug/L		107	70 - 130
Molinate	<0.10		1.96	2.20		ug/L		112	70 - 130
Naphthalene	<0.10		1.96	1.91		ug/L		98	70 - 130
Parathion	<0.10		1.96	2.27		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	<0.10		1.96	2.15		ug/L		110	70 - 130
Phenanthrene	<0.040		1.96	1.99		ug/L		102	70 - 130
Propachlor	<0.050		1.96	2.23		ug/L		114	70 - 130
Pyrene	<0.050		1.96	2.06		ug/L		105	70 - 130
Simazine	<0.050		1.96	2.22		ug/L		114	70 - 130
Terbacil	<0.10		1.96	2.04		ug/L		104	70 - 130
Terbutylazine	<0.10		1.96	2.31		ug/L		118	70 - 130
Thiobencarb	<0.10		1.96	2.08		ug/L		107	70 - 130
trans-Nonachlor	<0.050		1.96	1.96		ug/L		100	70 - 130
Trifluralin	<0.10		1.96	2.10		ug/L		107	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: 380-205433-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 217868**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 217404**

Surrogate	MS %Recovery	MS Qualifier	Limits
Perylene-d12	96		70 - 130
Triphenylphosphate	108		70 - 130

**Lab Sample ID: 380-205433-J-1-A MSD**  
**Matrix: Water**  
**Analysis Batch: 217868**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 217404**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1-Methylnaphthalene	<0.10		1.95	1.91		ug/L		98	70 - 130	1	20
2,4'-DDD	<0.10		1.95	1.96		ug/L		100	70 - 130	6	20
2,4'-DDE	<0.10		1.95	1.88		ug/L		96	70 - 130	4	20
2,4'-DDT	<0.10		1.95	1.79		ug/L		92	70 - 130	5	20
2,4-Dinitrotoluene	<0.10		1.95	2.03		ug/L		104	70 - 130	5	20
2,6-Dinitrotoluene	<0.10		1.95	2.02		ug/L		103	70 - 130	4	20
2-Methylnaphthalene	<0.10		1.95	1.94		ug/L		100	70 - 130	1	20
4,4'-DDD	<0.10		1.95	2.14		ug/L		110	70 - 130	2	20
4,4'-DDE	<0.10		1.95	1.77		ug/L		91	70 - 130	4	20
4,4'-DDT	<0.10		1.95	1.86		ug/L		95	70 - 130	6	20
Acenaphthene	<0.10		1.95	1.97		ug/L		101	70 - 130	1	20
Acenaphthylene	<0.10		1.95	2.07		ug/L		106	70 - 130	0	20
Acetochlor	<0.10		1.95	2.06		ug/L		106	70 - 130	1	20
Alachlor	<0.050		1.95	2.11		ug/L		108	70 - 130	0	20
alpha-BHC	<0.10		1.95	2.10		ug/L		107	70 - 130	4	20
alpha-Chlordane	<0.050		1.95	2.06		ug/L		106	70 - 130	9	20
Anthracene	<0.020	F1	1.95	1.30	F1	ug/L		66	70 - 130	10	20
Atrazine	<0.050		1.95	2.14		ug/L		110	70 - 130	6	20
Benz(a)anthracene	<0.050		1.95	2.03		ug/L		104	70 - 130	1	20
Benzo[a]pyrene	<0.020		1.95	1.90		ug/L		97	70 - 130	4	20
Benzo[b]fluoranthene	<0.020		1.95	2.09		ug/L		107	70 - 130	0	20
Benzo[g,h,i]perylene	<0.050		1.95	1.98		ug/L		102	70 - 130	3	20
Benzo[k]fluoranthene	<0.020		1.95	1.91		ug/L		98	70 - 130	4	20
beta-BHC	<0.10		1.95	2.20		ug/L		113	70 - 130	8	20
Bis(2-ethylhexyl) phthalate	<0.60		1.95	1.91		ug/L		98	70 - 130	5	20
Bromacil	<0.10		1.95	2.02		ug/L		103	70 - 130	3	20
Butachlor	<0.050		1.95	2.10		ug/L		107	70 - 130	2	20
Butylbenzylphthalate	<0.50		1.95	2.07		ug/L		106	70 - 130	3	20
Chlorobenzilate	<0.10		1.95	2.11		ug/L		108	70 - 130	1	20
Chloroneb	<0.10		1.95	2.13		ug/L		109	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	<0.10		1.95	2.06		ug/L		106	70 - 130	4	20
Chlorpyrifos	<0.050		1.95	2.05		ug/L		105	70 - 130	3	20
Chrysene	<0.020		1.95	2.18		ug/L		112	70 - 130	2	20
delta-BHC	<0.10		1.95	2.06		ug/L		106	70 - 130	2	20
Di(2-ethylhexyl)adipate	<0.60		1.95	1.92		ug/L		99	70 - 130	1	20
Dibenz(a,h)anthracene	<0.050		1.95	1.95		ug/L		100	70 - 130	3	20
Diclorvos (DDVP)	<0.050		1.95	2.17		ug/L		111	70 - 130	3	20
Dieldrin	<0.010		1.95	2.17		ug/L		111	70 - 130	3	20
Diethylphthalate	<0.50		1.95	2.17		ug/L		111	70 - 130	5	20
Dimethylphthalate	<0.50		1.95	2.11		ug/L		108	70 - 130	1	20

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: 380-205433-J-1-A MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 217868

Prep Batch: 217404

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
Di-n-butyl phthalate	<1.0		3.90	4.37		ug/L		112	70 - 130	3	20
Di-n-octyl phthalate	<0.10		1.95	1.82		ug/L		93	70 - 130	6	20
Endosulfan I (Alpha)	<0.10		1.95	2.17		ug/L		111	70 - 130	3	20
Endosulfan II (Beta)	<0.10		1.95	2.20		ug/L		113	70 - 130	0	20
Endosulfan sulfate	<0.10		1.95	2.09		ug/L		107	70 - 130	1	20
Endrin	<0.010		1.95	2.28		ug/L		117	70 - 130	2	20
Endrin aldehyde	<0.10		1.95	1.69		ug/L		87	60 - 130	3	20
EPTC	<0.10		1.95	2.12		ug/L		109	70 - 130	2	20
Fluoranthene	<0.10		1.95	2.02		ug/L		103	70 - 130	3	20
Fluorene	<0.050		1.95	2.11		ug/L		108	70 - 130	3	20
gamma-Chlordane	<0.050		1.95	2.16		ug/L		111	70 - 130	4	20
Heptachlor	<0.010		1.95	2.14		ug/L		110	70 - 130	2	20
Heptachlor epoxide (isomer B)	<0.010		1.95	2.05		ug/L		105	70 - 130	1	20
Hexachlorobenzene	<0.050		1.95	1.99		ug/L		102	70 - 130	6	20
Hexachlorocyclopentadiene	<0.050		1.95	1.77		ug/L		91	70 - 130	2	20
Indeno[1,2,3-cd]pyrene	<0.050		1.95	2.00		ug/L		102	70 - 130	4	20
Isophorone	<0.10		1.95	2.05		ug/L		105	70 - 130	4	20
Lindane	<0.010		1.95	2.25		ug/L		116	70 - 130	6	20
Malathion	<0.10		1.95	2.04		ug/L		104	70 - 130	2	20
Methoxychlor	<0.050		1.95	1.94		ug/L		99	70 - 130	5	20
Metolachlor	<0.050		1.95	2.04		ug/L		104	70 - 130	2	20
Molinate	<0.10		1.95	2.20		ug/L		113	70 - 130	0	20
Naphthalene	<0.10		1.95	1.93		ug/L		99	70 - 130	1	20
Parathion	<0.10		1.95	2.21		ug/L		113	70 - 130	3	20
Pendimethalin (Penoxaline)	<0.10		1.95	2.09		ug/L		107	70 - 130	3	20
Phenanthrene	<0.040		1.95	2.06		ug/L		105	70 - 130	3	20
Propachlor	<0.050		1.95	2.09		ug/L		107	70 - 130	7	20
Pyrene	<0.050		1.95	2.04		ug/L		104	70 - 130	1	20
Simazine	<0.050		1.95	2.08		ug/L		107	70 - 130	6	20
Terbacil	<0.10		1.95	2.09		ug/L		107	70 - 130	3	20
Terbutylazine	<0.10		1.95	2.12		ug/L		109	70 - 130	9	20
Thiobencarb	<0.10		1.95	2.06		ug/L		106	70 - 130	1	20
trans-Nonachlor	<0.050		1.95	1.88		ug/L		97	70 - 130	4	20
Trifluralin	<0.10		1.95	2.06		ug/L		106	70 - 130	2	20
		<b>MSD</b>	<b>MSD</b>								
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
2-Nitro-m-xylene	98		70 - 130								
Perylene-d12	96		70 - 130								
Triphenylphosphate	103		70 - 130								

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

Lab Sample ID: MB 570-718453/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 719742

Prep Batch: 718453

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	04/02/26 09:44	04/05/26 09:18	1

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# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: MB 570-718453/1-A**  
**Matrix: Water**  
**Analysis Batch: 719742**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	86		33 - 139	04/02/26 09:44	04/05/26 09:18	1
2-Fluorobiphenyl (Surr)	88		33 - 126	04/02/26 09:44	04/05/26 09:18	1
2-Fluorophenol (Surr)	62		12 - 120	04/02/26 09:44	04/05/26 09:18	1
Nitrobenzene-d5 (Surr)	93		36 - 120	04/02/26 09:44	04/05/26 09:18	1
Phenol-d6 (Surr)	38		10 - 120	04/02/26 09:44	04/05/26 09:18	1
p-Terphenyl-d14 (Surr)	93		47 - 131	04/02/26 09:44	04/05/26 09:18	1

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

**Lab Sample ID: MB 570-718453/1-A**  
**Matrix: Water**  
**Analysis Batch: 719706**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
2-Methylnaphthalene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Acenaphthene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Acenaphthylene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Anthracene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Benzo[a]anthracene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Benzo[a]pyrene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Chrysene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Fluoranthene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Fluorene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Naphthalene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Phenanthrene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1
Pyrene	<0.20		0.20	ug/L		04/02/26 09:44	04/05/26 03:17	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	107		28 - 127	04/02/26 09:44	04/05/26 03:17	1
2-Fluorobiphenyl (Surr)	105		31 - 120	04/02/26 09:44	04/05/26 03:17	1
2-Fluorophenol (Surr)	78		17 - 120	04/02/26 09:44	04/05/26 03:17	1
Nitrobenzene-d5 (Surr)	118		27 - 120	04/02/26 09:44	04/05/26 03:17	1
Phenol-d6 (Surr)	50		10 - 120	04/02/26 09:44	04/05/26 03:17	1
p-Terphenyl-d14 (Surr)	105		45 - 120	04/02/26 09:44	04/05/26 03:17	1

**Lab Sample ID: LCS 570-718453/2-A**  
**Matrix: Water**  
**Analysis Batch: 719706**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	20.0	16.1		ug/L		80	43 - 120

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: LCS 570-718453/2-A**

**Matrix: Water**

**Analysis Batch: 719706**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 718453**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	20.0	17.2		ug/L		86	60 - 132
Acenaphthylene	20.0	17.9		ug/L		90	54 - 126
Anthracene	20.0	16.8		ug/L		84	43 - 120
Benzo[a]anthracene	20.0	18.7		ug/L		93	42 - 133
Benzo[a]pyrene	20.0	18.1		ug/L		90	32 - 148
Benzo[b]fluoranthene	20.0	17.8		ug/L		89	42 - 140
Benzo[g,h,i]perylene	20.0	16.3		ug/L		82	1 - 195
Benzo[k]fluoranthene	20.0	17.3		ug/L		86	25 - 146
Chrysene	20.0	17.8		ug/L		89	44 - 140
Dibenz(a,h)anthracene	20.0	16.1		ug/L		80	1 - 200
Fluoranthene	20.0	16.9		ug/L		84	43 - 121
Fluorene	20.0	17.5		ug/L		87	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	16.5		ug/L		82	1 - 151
Naphthalene	20.0	14.9		ug/L		75	36 - 120
Phenanthrene	20.0	17.0		ug/L		85	65 - 120
Pyrene	20.0	20.4		ug/L		102	70 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	85		28 - 127
2-Fluorobiphenyl (Surr)	83		31 - 120
2-Fluorophenol (Surr)	71		17 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120
Phenol-d6 (Surr)	46		10 - 120
p-Terphenyl-d14 (Surr)	94		45 - 120

**Lab Sample ID: LCSD 570-718453/3-A**

**Matrix: Water**

**Analysis Batch: 719706**

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

**Prep Type: Total/NA**

**Prep Batch: 718453**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
1-Methylnaphthalene	20.0	16.4		ug/L		82	47 - 120	1	20
2-Methylnaphthalene	20.0	16.3		ug/L		82	43 - 120	2	20
Acenaphthene	20.0	19.3		ug/L		96	60 - 132	11	29
Acenaphthylene	20.0	19.4		ug/L		97	54 - 126	8	45
Anthracene	20.0	19.1		ug/L		95	43 - 120	13	40
Benzo[a]anthracene	20.0	21.4		ug/L		107	42 - 133	14	32
Benzo[a]pyrene	20.0	21.9		ug/L		109	32 - 148	19	43
Benzo[b]fluoranthene	20.0	20.9		ug/L		104	42 - 140	16	43
Benzo[g,h,i]perylene	20.0	19.3		ug/L		97	1 - 195	17	61
Benzo[k]fluoranthene	20.0	20.4		ug/L		102	25 - 146	17	38
Chrysene	20.0	20.3		ug/L		101	44 - 140	13	53
Dibenz(a,h)anthracene	20.0	19.4		ug/L		97	1 - 200	19	75
Fluoranthene	20.0	18.8		ug/L		94	43 - 121	11	40
Fluorene	20.0	19.0		ug/L		95	70 - 120	8	23
Indeno[1,2,3-cd]pyrene	20.0	19.2		ug/L		96	1 - 151	15	60
Naphthalene	20.0	15.3		ug/L		76	36 - 120	2	39
Phenanthrene	20.0	19.3		ug/L		96	65 - 120	13	24
Pyrene	20.0	23.2		ug/L		116	70 - 120	13	30

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# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: LCSD 570-718453/3-A**  
**Matrix: Water**  
**Analysis Batch: 719706**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	98		28 - 127
2-Fluorobiphenyl (Surr)	95		31 - 120
2-Fluorophenol (Surr)	72		17 - 120
Nitrobenzene-d5 (Surr)	83		27 - 120
Phenol d6 (Surr)	45		10 - 120
p-Terphenyl-d14 (Surr)	113		45 - 120

**Lab Sample ID: 380-205656-1 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 719706**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.19		19.4	14.7		ug/L		76	36 - 120
2-Methylnaphthalene	<0.19		19.4	14.3		ug/L		74	32 - 124
Acenaphthene	<0.19		19.4	16.7		ug/L		86	47 - 145
Acenaphthylene	<0.19		19.4	16.8		ug/L		87	33 - 145
Anthracene	<0.19		19.4	16.6		ug/L		85	27 - 133
Benzo[a]anthracene	<0.19		19.4	18.1		ug/L		93	33 - 143
Benzo[a]pyrene	<0.19		19.4	17.6		ug/L		91	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	17.7		ug/L		91	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	15.8		ug/L		81	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	17.2		ug/L		88	11 - 162
Chrysene	<0.19		19.4	17.2		ug/L		89	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	16.7		ug/L		86	1 - 227
Fluoranthene	<0.19		19.4	16.6		ug/L		85	26 - 137
Fluorene	<0.19		19.4	16.5		ug/L		85	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	16.0		ug/L		83	1 - 171
Naphthalene	<0.19		19.4	13.5		ug/L		70	21 - 133
Phenanthrene	<0.19		19.4	16.6		ug/L		85	54 - 120
Pyrene	<0.19		19.4	19.3		ug/L		99	52 - 120

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	85		28 - 127
2-Fluorobiphenyl (Surr)	84		31 - 120
2-Fluorophenol (Surr)	61		17 - 120
Nitrobenzene-d5 (Surr)	73		27 - 120
Phenol-d6 (Surr)	39		10 - 120
p-Terphenyl-d14 (Surr)	93		45 - 120

**Lab Sample ID: 380-205656-1 MSD**  
**Matrix: Drinking Water**  
**Analysis Batch: 719706**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**  
**Prep Batch: 718453**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1-Methylnaphthalene	<0.19		19.4	15.0		ug/L		77	36 - 120	2	30
2-Methylnaphthalene	<0.19		19.4	14.8		ug/L		77	32 - 124	4	30
Acenaphthene	<0.19		19.4	16.6		ug/L		86	47 - 145	1	48
Acenaphthylene	<0.19		19.4	16.9		ug/L		87	33 - 145	0	74

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

Lab Sample ID: 380-205656-1 MSD

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)

Matrix: Drinking Water

Prep Type: Total/NA

Analysis Batch: 719706

Prep Batch: 718453

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Anthracene	<0.19		19.4	16.6		ug/L		86	27 - 133	0	66
Benzo[a]anthracene	<0.19		19.4	18.0		ug/L		93	33 - 143	0	53
Benzo[a]pyrene	<0.19		19.4	17.5		ug/L		90	17 - 163	1	72
Benzo[b]fluoranthene	<0.19		19.4	17.4		ug/L		90	24 - 159	2	71
Benzo[g,h,i]perylene	<0.19		19.4	15.9		ug/L		82	1 - 219	1	97
Benzo[k]fluoranthene	<0.19		19.4	17.0		ug/L		88	11 - 162	1	63
Chrysene	<0.19		19.4	17.2		ug/L		89	17 - 168	0	87
Dibenz(a,h)anthracene	<0.19		19.4	16.5		ug/L		85	1 - 227	2	126
Fluoranthene	<0.19		19.4	16.4		ug/L		85	26 - 137	1	66
Fluorene	<0.19		19.4	16.4		ug/L		85	59 - 121	0	38
Indeno[1,2,3-cd]pyrene	<0.19		19.4	16.0		ug/L		83	1 - 171	0	99
Naphthalene	<0.19		19.4	13.7		ug/L		71	21 - 133	1	65
Phenanthrene	<0.19		19.4	16.7		ug/L		86	54 - 120	0	39
Pyrene	<0.19		19.4	19.2		ug/L		99	52 - 120	0	49

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	85		28 - 127
2-Fluorobiphenyl (Surr)	84		31 - 120
2-Fluorophenol (Surr)	61		17 - 120
Nitrobenzene-d5 (Surr)	74		27 - 120
Phenol-d6 (Surr)	39		10 - 120
p-Terphenyl-d14 (Surr)	92		45 - 120

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

Lab Sample ID: MB 570-720590/8

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 720590

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			04/07/26 13:19	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	93		38 - 134		04/07/26 13:19	1

Lab Sample ID: LCS 570-720590/5

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 720590

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Gasoline Range Organics (C4-C13)	400	428		ug/L		107	78 - 120

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		38 - 134

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: LCSD 570-720590/6**  
**Matrix: Water**  
**Analysis Batch: 720590**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	400	449		ug/L		112	78 - 120	5	10
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>				<b>Limits</b>		
4-Bromofluorobenzene (Surr)		100					38 - 134		

**Lab Sample ID: MRL 570-720590/9**  
**Matrix: Water**  
**Analysis Batch: 720590**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	10.0	12.8		ug/L		128	50 - 150		
<b>Surrogate</b>		<b>MRL %Recovery</b>	<b>MRL Qualifier</b>				<b>Limits</b>		
4-Bromofluorobenzene (Surr)		97					38 - 134		

**Lab Sample ID: 380-205656-1 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 720590**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	<10		400	438		ug/L		109	68 - 122		
<b>Surrogate</b>		<b>MS %Recovery</b>		<b>MS Qualifier</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)		89							38 - 134		

**Lab Sample ID: 380-205656-1 MSD**  
**Matrix: Drinking Water**  
**Analysis Batch: 720590**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	<10		400	432		ug/L		108	68 - 122	1	18
<b>Surrogate</b>		<b>MSD %Recovery</b>		<b>MSD Qualifier</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)		97							38 - 134		

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

**Lab Sample ID: MB 570-717817/1-A**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/01/26 08:51	04/06/26 22:19	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/01/26 08:51	04/06/26 22:19	1
C8-C18	<25		25	ug/L		04/01/26 08:51	04/06/26 22:19	1

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

	<i>MB</i>	<i>MB</i>					
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>	
<i>n-Octacosane (Surr)</i>	102		60 - 130	04/01/26 08:51	04/06/26 22:19	1	

**Lab Sample ID: LCS 570-717817/2-A**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

<i>Analyte</i>	<i>Spike Added</i>	<i>LCS Result</i>	<i>LCS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>		
C10-C28	1600	1530		ug/L		95	56 - 127		

	<i>LCS</i>	<i>LCS</i>		
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	
<i>n-Octacosane (Surr)</i>	105		60 - 130	

**Lab Sample ID: LCSD 570-717817/3-A**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>	
C10-C28	1600	1500		ug/L		94	56 - 127	1	23	

	<i>LCSD</i>	<i>LCSD</i>		
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	
<i>n-Octacosane (Surr)</i>	102		60 - 130	

**Lab Sample ID: MRL 570-717817/4-A**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

<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	0.0307	^3+	mg/L		154	50 - 150		

	<i>MRL</i>	<i>MRL</i>		
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	
<i>n-Octacosane (Surr)</i>	106		60 - 130	

**Lab Sample ID: 380-205433-C-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MS Result</i>	<i>MS Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>
C10-C28	<26	^3+	1650	1640		ug/L		99	70 - 130

	<i>MS</i>	<i>MS</i>		
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	
<i>n-Octacosane (Surr)</i>	109		60 - 130	

**Lab Sample ID: 380-205433-C-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>Spike Added</i>	<i>MSD Result</i>	<i>MSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec Limits</i>	<i>RPD</i>	<i>RPD Limit</i>
C10-C28	<26	^3+	1660	1590		ug/L		96	70 - 130	3	20

# QC Sample Results

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

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

**Lab Sample ID: 380-205433-C-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 720380**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

	<i>MSD</i>	<i>MSD</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	103		60 - 130

**Lab Sample ID: 380-205656-1 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 720380**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
C10-C28	<26	^3+	1660	1380		ug/L		83		70 - 130

	<i>MS</i>	<i>MS</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	105		60 - 130

**Lab Sample ID: 380-205656-1 MSD**  
**Matrix: Drinking Water**  
**Analysis Batch: 720380**

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**  
**Prep Type: Total/NA**  
**Prep Batch: 717817**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
C10-C28	<26	^3+	1670	1580		ug/L		95		70 - 130	14		20

	<i>MSD</i>	<i>MSD</i>	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
<i>n-Octacosane (Surr)</i>	105		60 - 130

# QC Association Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

## GC/MS Semi VOA

### Prep Batch: 217404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	525.2	
MB 380-217404/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-217404/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-217404/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-205433-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-205433-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 217868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	525.2	217404
MB 380-217404/21-A	Method Blank	Total/NA	Water	525.2	217404
LCS 380-217404/23-A	Lab Control Sample	Total/NA	Water	525.2	217404
MRL 380-217404/22-A	Lab Control Sample	Total/NA	Water	525.2	217404
380-205433-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	217404
380-205433-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	217404

### Prep Batch: 718453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1	
MB 570-718453/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-718453/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-718453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1	
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1	

### Analysis Batch: 719706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1 SIM	718453
MB 570-718453/1-A	Method Blank	Total/NA	Water	625.1 SIM	718453
LCS 570-718453/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	718453
LCSD 570-718453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	718453
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1 SIM	718453
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1 SIM	718453

### Analysis Batch: 719742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	625.1	718453
MB 570-718453/1-A	Method Blank	Total/NA	Water	625.1	718453

## GC VOA

### Analysis Batch: 720590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B GRO LL	
380-205656-2	TB: HALAWA WELLS P1 (331-023-WL065)	Total/NA	Water	8015B GRO LL	
MB 570-720590/8	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-720590/5	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-720590/6	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-720590/9	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B GRO LL	
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B GRO LL	

# QC Association Summary

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

## GC Semi VOA

### Prep Batch: 717817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	3510C	
MB 570-717817/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-717817/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-717817/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-717817/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-205433-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-205433-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	3510C	
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	3510C	

### Analysis Batch: 720380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B	717817
MB 570-717817/1-A	Method Blank	Total/NA	Water	8015B	717817
LCS 570-717817/2-A	Lab Control Sample	Total/NA	Water	8015B	717817
LCSD 570-717817/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	717817
MRL 570-717817/4-A	Lab Control Sample	Total/NA	Water	8015B	717817
380-205433-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	717817
380-205433-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	717817
380-205656-1 MS	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B	717817
380-205656-1 MSD	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	8015B	717817

## Lab Chronicle

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

**Client Sample ID: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-1**

Date Collected: 03/30/26 10:36

Matrix: Drinking Water

Date Received: 04/01/26 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			217404	KRD3	EA POM	04/02/26 09:12
Total/NA	Analysis	525.2		1	217868	Q8LA	EA POM	04/05/26 16:35
Total/NA	Prep	625.1			718453	KLZQ	EET CAL 4	04/02/26 09:44
Total/NA	Analysis	625.1		1	719742	PQS1	EET CAL 4	04/05/26 10:30
Total/NA	Prep	625.1			718453	KLZQ	EET CAL 4	04/02/26 09:44
Total/NA	Analysis	625.1 SIM		1	719706	PQS1	EET CAL 4	04/05/26 05:06
Total/NA	Analysis	8015B GRO LL		1	720590	A9VE	EET CAL 4	04/07/26 16:46
Total/NA	Prep	3510C			717817	TVD6	EET CAL 4	04/02/26 08:46
Total/NA	Analysis	8015B		1	720380	H6FE	EET CAL 4	04/07/26 01:11

**Client Sample ID: TB: HALAWA WELLS P1 (331-023-WL065)**

**Lab Sample ID: 380-205656-2**

Date Collected: 03/30/26 10:36

Matrix: Water

Date Received: 04/01/26 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	720590	A9VE	EET CAL 4	04/07/26 17:59

**Laboratory References:**

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

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

# Accreditation/Certification Summary

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

Job ID: 380-205656-1  
 SDG: Weekly: Halawa Wells P1 (MS/MSD)

## Laboratory: Eurofins 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	03-02-27
Arizona	State	AZ0830	11-17-26
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-26

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.

# Accreditation/Certification Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

## 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	02-02-27
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-27
Washington	State	C916	10-12-26

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# Method Summary

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

Job ID: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

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 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: 380-205656-1  
SDG: Weekly: Halawa Wells P1 (MS/MSD)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-205656-1	HALAWA WELLS P1 (331-023-WL065)	Drinking Water	03/30/26 10:36	04/01/26 10:10	HI0000331
380-205656-2	TB: HALAWA WELLS P1 (331-023-WL065)	Water	03/30/26 10:36	04/01/26 10:10	

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## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-205656-1  
SDG Number: Weekly: Halawa Wells P1 (MS/MSD)

**Login Number: 205656**

**List Number: 1**

**Creator: Hernandez, Orlando**

**List Source: Eurofins Pomona**

Question	Answer	Comment
The coolers custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
Samples were received on ice.	True	
Cooler(s) Temperature is acceptable.	True	
Cooler(s) Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and is legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
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: 380-205656-1  
SDG Number: Weekly: Halawa Wells P1 (MS/MSD)

**Login Number: 205656**  
**List Number: 2**  
**Creator: Khana, Piyush**

**List Source: Eurofins Calscience**  
**List Creation: 04/01/26 06:25 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	4.5, 2.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	fgf5
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

