

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

RED-HILL  
Weekly: Moanalua Wells

## JOB NUMBER

380-204668-1

# 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



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# Definitions/Glossary

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD 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.

## 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: 380-204668-1

**Job ID: 380-204668-1**

**Eurofins Pomona**

## Job Narrative 380-204668-1

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 3/25/2026 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.5°C and 5.0°C.

### Receipt Exceptions

The number of containers for the following sample did not match the information listed on the Chain-of-Custody (COC): TB:MOANALUA WELLS (331-223-TP202) (380-204668-2). Received two containers for method 525.2 while the COC listed one. MOANALUA WELLS (331-223-TP202) (380-204668-1)

### GC/MS Semi VOA

Method 625.1 SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-714257 and analytical batch 570-714932 recovered outside control limits for the following analytes: 1-Methylnaphthalene. Laboratory control sample / laboratory control sample duplicate (LCS/LCSD) percent recovery is in control for affected analytes.

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

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: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.025		0.0098	ug/L	1		525.2	Total/NA

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

**Lab Sample ID: 380-204668-2**

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: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

Date Collected: 03/23/26 10:26

Matrix: Drinking Water

Date Received: 03/25/26 10:00

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		03/29/26 09:56	03/30/26 15:15	1
2,4'-DDD	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
2,4'-DDE	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
2,4'-DDT	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
2-Methylnaphthalene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
4,4'-DDD	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
4,4'-DDE	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
4,4'-DDT	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Acenaphthene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Acenaphthylene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Acetochlor	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Alachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
alpha-BHC	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
alpha-Chlordane	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Anthracene	<0.020		0.020	ug/L		03/29/26 09:56	03/30/26 15:15	1
Atrazine	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Benz(a)anthracene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Benzo[a]pyrene	<0.020		0.020	ug/L		03/29/26 09:56	03/30/26 15:15	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		03/29/26 09:56	03/30/26 15:15	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		03/29/26 09:56	03/30/26 15:15	1
beta-BHC	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		03/29/26 09:56	03/30/26 15:15	1
Bromacil	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Butachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Butylbenzylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 15:15	1
Chlorobenzilate	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Chloroneb	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Chlorpyrifos	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Chrysene	<0.020		0.020	ug/L		03/29/26 09:56	03/30/26 15:15	1
delta-BHC	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		03/29/26 09:56	03/30/26 15:15	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
<b>Dieldrin</b>	<b>0.025</b>		0.0098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Diethylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 15:15	1
Dimethylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 15:15	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		03/29/26 09:56	03/30/26 15:15	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Endosulfan sulfate	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Endrin	<0.0098		0.0098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Endrin aldehyde	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
EPTC	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Fluoranthene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1

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# Client Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

Date Collected: 03/23/26 10:26

Matrix: Drinking Water

Date Received: 03/25/26 10:00

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		03/29/26 09:56	03/30/26 15:15	1
gamma-Chlordane	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Heptachlor	<0.0098		0.0098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Hexachlorobenzene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Isophorone	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Lindane	<0.0098		0.0098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Malathion	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Methoxychlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Metolachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Molinate	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Naphthalene	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Parathion	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Phenanthrene	<0.039		0.039	ug/L		03/29/26 09:56	03/30/26 15:15	1
Propachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Pyrene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Simazine	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Terbacil	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Terbutylazine	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Thiobencarb	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		03/29/26 09:56	03/30/26 15:15	1
trans-Nonachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 15:15	1
Trifluralin	<0.098		0.098	ug/L		03/29/26 09:56	03/30/26 15:15	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	03/29/26 09:56	03/30/26 15:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	03/29/26 09:56	03/30/26 15:15	1
Perylene-d12	90		70 - 130	03/29/26 09:56	03/30/26 15:15	1
Triphenylphosphate	103		70 - 130	03/29/26 09:56	03/30/26 15:15	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	*1	0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
2-Methylnaphthalene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Acenaphthene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Acenaphthylene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Anthracene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Benzo[a]anthracene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Benzo[a]pyrene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Chrysene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Fluoranthene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1

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# Client Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

Date Collected: 03/23/26 10:26

Matrix: Drinking Water

Date Received: 03/25/26 10:00

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		03/25/26 21:49	04/02/26 21:12	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Naphthalene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Phenanthrene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1
Pyrene	<0.19		0.19	ug/L		03/25/26 21:49	04/02/26 21:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		28 - 127	03/25/26 21:49	04/02/26 21:12	1
2-Fluorobiphenyl (Surr)	90		31 - 120	03/25/26 21:49	04/02/26 21:12	1
2-Fluorophenol (Surr)	56		17 - 120	03/25/26 21:49	04/02/26 21:12	1
Nitrobenzene-d5 (Surr)	90		27 - 120	03/25/26 21:49	04/02/26 21:12	1
Phenol-d6 (Surr)	35		10 - 120	03/25/26 21:49	04/02/26 21:12	1
p-Terphenyl-d14 (Surr)	85		45 - 120	03/25/26 21:49	04/02/26 21:12	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
Cyclic octaatomic sulfur	8.8	T J N	ug/L		9.81	10544-50-0	03/25/26 21:49	04/05/26 14:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		33 - 139	03/25/26 21:49	04/05/26 14:33	1
2-Fluorobiphenyl (Surr)	94		33 - 126	03/25/26 21:49	04/05/26 14:33	1
2-Fluorophenol (Surr)	61		12 - 120	03/25/26 21:49	04/05/26 14:33	1
Nitrobenzene-d5 (Surr)	95		36 - 120	03/25/26 21:49	04/05/26 14:33	1
Phenol-d6 (Surr)	36		10 - 120	03/25/26 21:49	04/05/26 14:33	1
p-Terphenyl-d14 (Surr)	95		47 - 131	03/25/26 21:49	04/05/26 14:33	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			04/03/26 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		38 - 134		04/03/26 19:20	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		03/27/26 10:35	04/02/26 15:23	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		03/27/26 10:35	04/02/26 15:23	1
C8-C18	<26		26	ug/L		03/27/26 10:35	04/02/26 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	100		60 - 130	03/27/26 10:35	04/02/26 15:23	1

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

**Lab Sample ID: 380-204668-2**

Date Collected: 03/23/26 10:26

Matrix: Water

Date Received: 03/25/26 10:00

**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			04/03/26 19:45	1

# Client Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-2**

**Date Collected: 03/23/26 10:26**

**Matrix: Water**

**Date Received: 03/25/26 10:00**

<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)	94		38 - 134		04/03/26 19:45	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: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

## Compliance Check

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

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

# Surrogate Summary

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

Job ID: 380-204668-1  
SDG: Weekly: 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)
380-204668-1	MOANALUA WELLS (331-223-T	99	90	103
380-204668-1 DU	MOANALUA WELLS (331-223-TP202)	93	91	100

**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)
380-204658-I-1-A MS	Matrix Spike	95	95	101
LCS 380-216414/23-A	Lab Control Sample	94	95	101
LCSD 380-216414/24-A	Lab Control Sample Dup	95	97	102
MB 380-216414/21-A	Method Blank	95	88	99
MRL 380-216414/22-A	Lab Control Sample	95	89	98

**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)
380-204668-1	MOANALUA WELLS (331-223-T	87	94	61	95	36	95

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
MB 570-714257/1-A	Method Blank	80	74	52	79	33	79

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

# Surrogate Summary

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

Job ID: 380-204668-1  
 SDG: Weekly: Moanalua Wells

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)
380-204668-1	MOANALUA WELLS (331-223-T	89	90	56	90	35	85

### 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)
380-204658-A-1-A MS	Matrix Spike	80	80	62	70	41	87
380-204658-A-1-B MSD	Matrix Spike Duplicate	83	86	64	72	43	92
LCS 570-714257/2-A	Lab Control Sample	86	82	62	61	34	85
LCS 570-714257/3-A	Lab Control Sample Dup	81	78	62	76	35	91
MB 570-714257/1-A	Method Blank	74	65	47	75	27	77

### 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)
380-204668-1	MOANALUA WELLS (331-223-T	101

### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-204658-B-1 MS	Matrix Spike	106

# Surrogate Summary

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-204658-B-1 MSD	Matrix Spike Duplicate	121
380-204668-2	TB:MOANALUA WELLS (331-223-TP202)	94
LCS 570-719037/1010	Lab Control Sample	101
LCSD 570-719037/11	Lab Control Sample Dup	96
MB 570-719037/12	Method Blank	81
MRL 570 719037/1005	Lab Control Sample	93

#### 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)
380-204668-1	MOANALUA WELLS (331-223-T	100

#### 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)
380-204658-C-1-A MS	Matrix Spike	101
380-204658-C-1-B MSD	Matrix Spike Duplicate	102
LCS 570-715739/2-A	Lab Control Sample	103
LCSD 570-715739/3-A	Lab Control Sample Dup	103
MB 570-715739/1-A	Method Blank	100
MRL 570-715739/4-A	Lab Control Sample	98

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-204668-1  
 SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MB 380-216414/21-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2,4'-DDD	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2,4'-DDE	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2,4'-DDT	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
2-Methylnaphthalene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
4,4'-DDD	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
4,4'-DDE	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
4,4'-DDT	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Acenaphthene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Acenaphthylene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Acetochlor	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Alachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
alpha-BHC	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
alpha-Chlordane	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Anthracene	<0.019		0.019	ug/L		03/29/26 09:56	03/30/26 13:13	1
Atrazine	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Benz(a)anthracene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Benzo[a]pyrene	<0.019		0.019	ug/L		03/29/26 09:56	03/30/26 13:13	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		03/29/26 09:56	03/30/26 13:13	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		03/29/26 09:56	03/30/26 13:13	1
beta-BHC	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		03/29/26 09:56	03/30/26 13:13	1
Bromacil	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Butachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Butylbenzylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 13:13	1
Chlorobenzilate	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Chloroneb	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Chlorpyrifos	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Chrysene	<0.019		0.019	ug/L		03/29/26 09:56	03/30/26 13:13	1
delta-BHC	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		03/29/26 09:56	03/30/26 13:13	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Dieldrin	<0.0097		0.0097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Diethylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 13:13	1
Dimethylphthalate	<0.49		0.49	ug/L		03/29/26 09:56	03/30/26 13:13	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		03/29/26 09:56	03/30/26 13:13	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Endosulfan sulfate	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Endrin	<0.0097		0.0097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Endrin aldehyde	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
EPTC	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MB 380-216414/21-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Fluorene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
gamma-Chlordane	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Heptachlor	<0.0097		0.0097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Hexachlorobenzene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Isophorone	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Lindane	<0.0097		0.0097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Malathion	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Methoxychlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Metolachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Molinate	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Naphthalene	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Parathion	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Phenanthrene	<0.039		0.039	ug/L		03/29/26 09:56	03/30/26 13:13	1
Propachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Pyrene	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Simazine	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Terbacil	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Terbutylazine	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Thiobencarb	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		03/29/26 09:56	03/30/26 13:13	1
trans-Nonachlor	<0.049		0.049	ug/L		03/29/26 09:56	03/30/26 13:13	1
Trifluralin	<0.097		0.097	ug/L		03/29/26 09:56	03/30/26 13:13	1

<i>Tentatively Identified Compound</i>	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
<i>Cyclopentene, 1,2,3,3,4-pentamethyl-</i>	1.16	T J N	ug/L		2.55	197390-29-7	03/29/26 09:56	03/30/26 13:13	1
<i>Undecane</i>	4.96	T J N	ug/L		3.14	1120-21-4	03/29/26 09:56	03/30/26 13:13	1
<i>Unknown</i>	1.38	T J	ug/L		3.89	N/A	03/29/26 09:56	03/30/26 13:13	1
<i>9-Octadecenamide, (Z)-</i>	1.61	T J N	ug/L		7.92	301-02-0	03/29/26 09:56	03/30/26 13:13	1
<i>13-Docosenamide, (Z)-</i>	0.510	T J N	ug/L		10.46	112-84-5	03/29/26 09:56	03/30/26 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	03/29/26 09:56	03/30/26 13:13	1
Perylene-d12	88		70 - 130	03/29/26 09:56	03/30/26 13:13	1
Triphenylphosphate	99		70 - 130	03/29/26 09:56	03/30/26 13:13	1

**Lab Sample ID: LCS 380-216414/23-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.94	1.94		ug/L		100	70 - 130
2,4'-DDD	1.94	2.27		ug/L		117	70 - 130
2,4'-DDE	1.94	2.37		ug/L		122	70 - 130

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCS 380-216414/23-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDT	1.94	2.08		ug/L		107	70 - 130
2,4-Dinitrotoluene	1.94	1.85		ug/L		95	70 - 130
2,6-Dinitrotoluene	1.94	1.85		ug/L		95	70 - 130
2-Methylnaphthalene	1.94	2.03		ug/L		105	70 - 130
4,4'-DDD	1.94	2.40		ug/L		124	70 - 130
4,4'-DDE	1.94	2.07		ug/L		106	70 - 130
4,4'-DDT	1.94	2.25		ug/L		116	70 - 130
Acenaphthene	1.94	1.99		ug/L		102	70 - 130
Acenaphthylene	1.94	2.08		ug/L		107	70 - 130
Acetochlor	1.94	2.21		ug/L		114	70 - 130
Alachlor	1.94	2.27		ug/L		117	70 - 130
alpha-BHC	1.94	1.97		ug/L		101	70 - 130
alpha-Chlordane	1.94	2.07		ug/L		107	70 - 130
Anthracene	1.94	2.07		ug/L		107	70 - 130
Atrazine	1.94	2.02		ug/L		104	70 - 130
Benz(a)anthracene	1.94	2.19		ug/L		113	70 - 130
Benzo[a]pyrene	1.94	2.08		ug/L		107	70 - 130
Benzo[b]fluoranthene	1.94	2.21		ug/L		114	70 - 130
Benzo[g,h,i]perylene	1.94	2.07		ug/L		107	70 - 130
Benzo[k]fluoranthene	1.94	2.05		ug/L		105	70 - 130
beta-BHC	1.94	2.03		ug/L		105	70 - 130
Bis(2-ethylhexyl) phthalate	1.94	2.25		ug/L		116	70 - 130
Bromacil	1.94	1.73		ug/L		89	70 - 130
Butachlor	1.94	2.40		ug/L		124	70 - 130
Butylbenzylphthalate	1.94	2.36		ug/L		122	70 - 130
Chlorobenzilate	1.94	2.22		ug/L		114	70 - 130
Chloroneb	1.94	2.02		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.94	2.05		ug/L		105	70 - 130
Chlorpyrifos	1.94	2.32		ug/L		119	70 - 130
Chrysene	1.94	2.19		ug/L		113	70 - 130
delta-BHC	1.94	1.94		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	1.94	2.51		ug/L		129	70 - 130
Dibenz(a,h)anthracene	1.94	2.09		ug/L		107	70 - 130
Diclorvos (DDVP)	1.94	1.92		ug/L		99	70 - 130
Dieldrin	1.94	2.27		ug/L		117	70 - 130
Diethylphthalate	1.94	2.26		ug/L		116	70 - 130
Dimethylphthalate	1.94	2.01		ug/L		104	70 - 130
Di-n-butyl phthalate	3.89	4.44		ug/L		114	70 - 130
Di-n-octyl phthalate	1.94	2.31		ug/L		119	70 - 130
Endosulfan I (Alpha)	1.94	2.18		ug/L		112	70 - 130
Endosulfan II (Beta)	1.94	2.11		ug/L		108	70 - 130
Endosulfan sulfate	1.94	2.02		ug/L		104	70 - 130
Endrin	1.94	2.25		ug/L		116	70 - 130
Endrin aldehyde	1.94	1.95		ug/L		100	60 - 130
EPTC	1.94	2.21		ug/L		114	70 - 130
Fluoranthene	1.94	2.25		ug/L		116	70 - 130
Fluorene	1.94	2.11		ug/L		109	70 - 130
gamma-Chlordane	1.94	2.18		ug/L		112	70 - 130
Heptachlor	1.94	2.03		ug/L		105	70 - 130

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCS 380-216414/23-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (isomer B)	1.94	1.96		ug/L		101	70 - 130
Hexachlorobenzene	1.94	2.02		ug/L		104	70 - 130
Hexachlorocyclopentadiene	1.94	1.76		ug/L		90	70 - 130
Indeno[1,2,3-cd]pyrene	1.94	2.15		ug/L		111	70 - 130
Isophorone	1.94	1.95		ug/L		100	70 - 130
Lindane	1.94	2.21		ug/L		114	70 - 130
Malathion	1.94	2.08		ug/L		107	70 - 130
Methoxychlor	1.94	1.87		ug/L		96	70 - 130
Metolachlor	1.94	2.30		ug/L		118	70 - 130
Molinate	1.94	2.20		ug/L		113	70 - 130
Naphthalene	1.94	1.97		ug/L		102	70 - 130
Parathion	1.94	2.20		ug/L		113	70 - 130
Pendimethalin (Penoxaline)	1.94	2.15		ug/L		111	70 - 130
Phenanthrene	1.94	1.99		ug/L		102	70 - 130
Propachlor	1.94	2.21		ug/L		114	70 - 130
Pyrene	1.94	2.35		ug/L		121	70 - 130
Simazine	1.94	1.85		ug/L		95	70 - 130
Terbacil	1.94	1.59		ug/L		82	70 - 130
Terbutylazine	1.94	2.11		ug/L		108	70 - 130
Thiobencarb	1.94	2.25		ug/L		116	70 - 130
trans-Nonachlor	1.94	2.03		ug/L		104	70 - 130
Trifluralin	1.94	2.04		ug/L		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	101		70 - 130

**Lab Sample ID: LCSD 380-216414/24-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.95	1.94		ug/L		99	70 - 130	0	20
2,4'-DDD	1.95	2.30		ug/L		118	70 - 130	2	20
2,4'-DDE	1.95	2.40		ug/L		123	70 - 130	1	20
2,4'-DDT	1.95	2.13		ug/L		110	70 - 130	3	20
2,4-Dinitrotoluene	1.95	1.93		ug/L		99	70 - 130	4	20
2,6-Dinitrotoluene	1.95	1.90		ug/L		98	70 - 130	3	20
2-Methylnaphthalene	1.95	2.05		ug/L		105	70 - 130	1	20
4,4'-DDD	1.95	2.43		ug/L		125	70 - 130	1	20
4,4'-DDE	1.95	2.08		ug/L		107	70 - 130	1	20
4,4'-DDT	1.95	2.28		ug/L		117	70 - 130	1	20
Acenaphthene	1.95	2.01		ug/L		103	70 - 130	1	20
Acenaphthylene	1.95	2.11		ug/L		108	70 - 130	2	20
Acetochlor	1.95	2.25		ug/L		116	70 - 130	2	20
Alachlor	1.95	2.28		ug/L		117	70 - 130	0	20
alpha-BHC	1.95	2.01		ug/L		103	70 - 130	2	20

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCSD 380-216414/24-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
alpha-Chlordane	1.95	2.08		ug/L		107	70 - 130	1	20	
Anthracene	1.95	2.13		ug/L		109	70 - 130	3	20	
Atrazine	1.95	2.12		ug/L		109	70 - 130	5	20	
Benz(a)anthracene	1.95	2.25		ug/L		116	70 - 130	3	20	
Benzo[a]pyrene	1.95	2.14		ug/L		110	70 - 130	3	20	
Benzo[b]fluoranthene	1.95	2.23		ug/L		115	70 - 130	1	20	
Benzo[g,h,i]perylene	1.95	2.12		ug/L		109	70 - 130	2	20	
Benzo[k]fluoranthene	1.95	2.05		ug/L		105	70 - 130	0	20	
beta-BHC	1.95	2.09		ug/L		108	70 - 130	3	20	
Bis(2-ethylhexyl) phthalate	1.95	2.25		ug/L		116	70 - 130	0	20	
Bromacil	1.95	1.73		ug/L		89	70 - 130	0	20	
Butachlor	1.95	2.45		ug/L		126	70 - 130	2	20	
Butylbenzylphthalate	1.95	2.32		ug/L		119	70 - 130	2	20	
Chlorobenzilate	1.95	2.28		ug/L		117	70 - 130	3	20	
Chloroneb	1.95	2.05		ug/L		105	70 - 130	1	20	
Chlorothalonil (Draconil, Bravo)	1.95	2.05		ug/L		105	70 - 130	0	20	
Chlorpyrifos	1.95	2.39		ug/L		123	70 - 130	3	20	
Chrysene	1.95	2.25		ug/L		116	70 - 130	3	20	
delta-BHC	1.95	1.95		ug/L		100	70 - 130	0	20	
Di(2-ethylhexyl)adipate	1.95	2.48		ug/L		127	70 - 130	1	20	
Dibenz(a,h)anthracene	1.95	2.14		ug/L		110	70 - 130	3	20	
Diclorvos (DDVP)	1.95	2.07		ug/L		107	70 - 130	8	20	
Dieldrin	1.95	2.27		ug/L		117	70 - 130	0	20	
Diethylphthalate	1.95	2.30		ug/L		118	70 - 130	2	20	
Dimethylphthalate	1.95	2.08		ug/L		107	70 - 130	3	20	
Di-n-butyl phthalate	3.89	4.46		ug/L		115	70 - 130	1	20	
Di-n-octyl phthalate	1.95	2.33		ug/L		120	70 - 130	1	20	
Endosulfan I (Alpha)	1.95	2.16		ug/L		111	70 - 130	1	20	
Endosulfan II (Beta)	1.95	2.11		ug/L		108	70 - 130	0	20	
Endosulfan sulfate	1.95	2.04		ug/L		105	70 - 130	1	20	
Endrin	1.95	2.30		ug/L		118	70 - 130	2	20	
Endrin aldehyde	1.95	2.02		ug/L		104	60 - 130	3	20	
EPTC	1.95	2.21		ug/L		114	70 - 130	0	20	
Fluoranthene	1.95	2.30		ug/L		118	70 - 130	2	20	
Fluorene	1.95	2.14		ug/L		110	70 - 130	1	20	
gamma-Chlordane	1.95	2.22		ug/L		114	70 - 130	2	20	
Heptachlor	1.95	2.10		ug/L		108	70 - 130	3	20	
Heptachlor epoxide (isomer B)	1.95	2.00		ug/L		103	70 - 130	2	20	
Hexachlorobenzene	1.95	2.07		ug/L		106	70 - 130	3	20	
Hexachlorocyclopentadiene	1.95	1.82		ug/L		94	70 - 130	4	20	
Indeno[1,2,3-cd]pyrene	1.95	2.12		ug/L		109	70 - 130	1	20	
Isophorone	1.95	2.03		ug/L		104	70 - 130	4	20	
Lindane	1.95	2.24		ug/L		115	70 - 130	1	20	
Malathion	1.95	2.12		ug/L		109	70 - 130	2	20	
Methoxychlor	1.95	1.94		ug/L		100	70 - 130	4	20	
Metolachlor	1.95	2.32		ug/L		119	70 - 130	1	20	
Molinate	1.95	2.23		ug/L		114	70 - 130	1	20	
Naphthalene	1.95	2.03		ug/L		104	70 - 130	3	20	
Parathion	1.95	2.21		ug/L		114	70 - 130	1	20	

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCSD 380-216414/24-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pendimethalin (Penoxaline)	1.95	2.19		ug/L		112	70 - 130	2	20
Phenanthrene	1.95	2.01		ug/L		103	70 - 130	1	20
Propachlor	1.95	2.27		ug/L		117	70 - 130	3	20
Pyrene	1.95	2.38		ug/L		122	70 - 130	1	20
Simazine	1.95	1.97		ug/L		101	70 - 130	6	20
Terbacil	1.95	1.70		ug/L		87	70 - 130	7	20
Terbutylazine	1.95	2.15		ug/L		111	70 - 130	2	20
Thiobencarb	1.95	2.30		ug/L		118	70 - 130	2	20
trans-Nonachlor	1.95	2.08		ug/L		107	70 - 130	3	20
Trifluralin	1.95	2.10		ug/L		108	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	102		70 - 130

**Lab Sample ID: MRL 380-216414/22-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0974	0.119		ug/L		122	50 - 150
2,4'-DDD	0.0974	0.101		ug/L		104	50 - 150
2,4'-DDE	0.0974	0.113		ug/L		116	50 - 150
2,4'-DDT	0.0974	0.113		ug/L		116	50 - 150
2,4-Dinitrotoluene	0.0974	0.105		ug/L		108	50 - 150
2,6-Dinitrotoluene	0.0974	0.121		ug/L		124	50 - 150
2-Methylnaphthalene	0.0974	0.116		ug/L		119	50 - 150
4,4'-DDD	0.0974	0.121		ug/L		124	50 - 150
4,4'-DDE	0.0974	0.114		ug/L		117	50 - 150
4,4'-DDT	0.0974	0.115		ug/L		118	50 - 150
Acenaphthene	0.0974	0.108		ug/L		111	50 - 150
Acenaphthylene	0.0974	0.101		ug/L		104	50 - 150
Acetochlor	0.0974	0.112		ug/L		115	50 - 150
Alachlor	0.0487	0.0523		ug/L		107	50 - 150
alpha-BHC	0.0974	0.105		ug/L		108	50 - 150
alpha-Chlordane	0.0244	<0.028		ug/L		109	50 - 150
Anthracene	0.0195	0.0244		ug/L		125	50 - 150
Atrazine	0.0487	0.0563		ug/L		116	50 - 150
Benz(a)anthracene	0.0487	0.0590		ug/L		121	50 - 150
Benzo[a]pyrene	0.0195	0.0205		ug/L		105	50 - 150
Benzo[b]fluoranthene	0.0195	0.0272		ug/L		140	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0534		ug/L		110	50 - 150
Benzo[k]fluoranthene	0.0195	0.0242		ug/L		124	50 - 150
beta-BHC	0.0974	0.114		ug/L		117	50 - 150
Bis(2-ethylhexyl) phthalate	0.585	0.651		ug/L		111	50 - 150
Bromacil	0.0974	0.108		ug/L		111	50 - 150
Butachlor	0.0487	0.0622		ug/L		128	50 - 150

# QC Sample Results

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

Job ID: 380-204668-1  
 SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MRL 380-216414/22-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Butylbenzylphthalate	0.487	0.619		ug/L		127	50 - 150
Chlorobenzilate	0.0974	0.109		ug/L		112	50 - 150
Chloroneb	0.0974	0.100		ug/L		103	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0974	0.0970		ug/L		100	50 - 150
Chlorpyrifos	0.0487	0.0468	J	ug/L		96	50 - 150
Chrysene	0.0195	0.0228		ug/L		117	50 - 150
delta-BHC	0.0974	0.101		ug/L		104	50 - 150
Di(2-ethylhexyl)adipate	0.585	0.739		ug/L		126	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0530		ug/L		109	50 - 150
Diclorvos (DDVP)	0.0487	0.0613		ug/L		126	50 - 150
Dieldrin	0.00974	0.0108		ug/L		111	50 - 150
Diethylphthalate	0.487	0.577		ug/L		119	50 - 150
Dimethylphthalate	0.487	0.519		ug/L		106	50 - 150
Di-n-butyl phthalate	0.487	0.509	J	ug/L		105	49 - 243
Di-n-octyl phthalate	0.0974	0.107		ug/L		110	50 - 150
Endosulfan I (Alpha)	0.0974	0.101		ug/L		104	50 - 150
Endosulfan II (Beta)	0.0974	0.105		ug/L		108	50 - 150
Endosulfan sulfate	0.0974	0.105		ug/L		108	50 - 150
Endrin	0.00974	0.00964	J	ug/L		99	50 - 150
Endrin aldehyde	0.0974	0.107		ug/L		110	50 - 150
EPTC	0.0974	0.106		ug/L		109	50 - 150
Fluoranthene	0.0974	0.0964	J	ug/L		99	50 - 150
Fluorene	0.0487	0.0547		ug/L		112	50 - 150
gamma-Chlordane	0.0244	0.0264	J	ug/L		108	50 - 150
Heptachlor	0.00974	0.0120		ug/L		123	50 - 150
Heptachlor epoxide (isomer B)	0.00974	0.00981		ug/L		101	50 - 150
Hexachlorobenzene	0.0487	0.0523		ug/L		107	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0526		ug/L		108	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0506		ug/L		104	50 - 150
Isophorone	0.0974	0.115		ug/L		118	50 - 150
Lindane	0.00974	0.0142		ug/L		146	50 - 150
Malathion	0.0974	0.106		ug/L		109	50 - 150
Methoxychlor	0.0487	0.0505		ug/L		104	50 - 150
Metolachlor	0.0487	0.0583		ug/L		120	50 - 150
Molinate	0.0974	0.107		ug/L		109	50 - 150
Naphthalene	0.0974	0.104		ug/L		107	50 - 150
Parathion	0.0974	0.0959	J	ug/L		98	50 - 150
Pendimethalin (Penoxaline)	0.0974	0.104		ug/L		106	50 - 150
Phenanthrene	0.0390	0.0455		ug/L		117	50 - 150
Propachlor	0.0487	0.0558		ug/L		115	50 - 150
Pyrene	0.0487	0.0526		ug/L		108	50 - 150
Simazine	0.0487	0.0509		ug/L		104	50 - 150
Terbacil	0.0974	0.0983		ug/L		101	50 - 150
Terbutylazine	0.0974	0.106		ug/L		109	50 - 150
Thiobencarb	0.0974	0.115		ug/L		118	50 - 150
trans-Nonachlor	0.0244	0.0293	J	ug/L		120	50 - 150
Trifluralin	0.0974	0.105		ug/L		108	50 - 150

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MRL 380-216414/22-A**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

<i>Surrogate</i>	<i>MRL</i> <i>%Recovery</i>	<i>MRL</i> <i>Qualifier</i>	<i>Limits</i>
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	89		70 - 130
Triphenylphosphate	98		70 - 130

**Lab Sample ID: 380-204658-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 216678**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

<i>Analyte</i>	<i>Sample</i> <i>Result</i>	<i>Sample</i> <i>Qualifier</i>	<i>Spike</i> <i>Added</i>	<i>MS</i> <i>Result</i>	<i>MS</i> <i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> <i>Limits</i>
1-Methylnaphthalene	<0.098		1.95	1.94		ug/L		99	70 - 130
2,4'-DDD	<0.098		1.95	2.28		ug/L		117	70 - 130
2,4'-DDE	<0.098		1.95	2.41		ug/L		124	70 - 130
2,4'-DDT	<0.098		1.95	2.20		ug/L		113	70 - 130
2,4-Dinitrotoluene	<0.098		1.95	2.01		ug/L		103	70 - 130
2,6-Dinitrotoluene	<0.098		1.95	2.00		ug/L		103	70 - 130
2-Methylnaphthalene	<0.098		1.95	2.04		ug/L		104	70 - 130
4,4'-DDD	<0.098		1.95	2.42		ug/L		124	70 - 130
4,4'-DDE	<0.098		1.95	2.10		ug/L		108	70 - 130
4,4'-DDT	<0.098		1.95	2.38		ug/L		122	70 - 130
Acenaphthene	<0.098		1.95	2.00		ug/L		103	70 - 130
Acenaphthylene	<0.098		1.95	2.15		ug/L		110	70 - 130
Acetochlor	<0.098		1.95	2.23		ug/L		114	70 - 130
Alachlor	<0.049		1.95	2.23		ug/L		114	70 - 130
alpha-BHC	<0.098		1.95	2.01		ug/L		103	70 - 130
alpha-Chlordane	<0.049		1.95	2.11		ug/L		107	70 - 130
Anthracene	<0.020		1.95	1.70		ug/L		87	70 - 130
Atrazine	<0.049		1.95	2.14		ug/L		109	70 - 130
Benz(a)anthracene	<0.049		1.95	2.21		ug/L		113	70 - 130
Benzo[a]pyrene	<0.020		1.95	2.07		ug/L		106	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	2.21		ug/L		113	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	2.06		ug/L		105	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.05		ug/L		105	70 - 130
beta-BHC	<0.098		1.95	2.11		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.95	2.20		ug/L		113	70 - 130
Bromacil	<0.098		1.95	1.93		ug/L		95	70 - 130
Butachlor	<0.049		1.95	2.41		ug/L		123	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.30		ug/L		118	70 - 130
Chlorobenzilate	<0.098		1.95	2.26		ug/L		116	70 - 130
Chloroneb	<0.098		1.95	2.06		ug/L		106	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.06		ug/L		106	70 - 130
Chlorpyrifos	<0.049		1.95	2.38		ug/L		122	70 - 130
Chrysene	<0.020		1.95	2.21		ug/L		113	70 - 130
delta-BHC	<0.098		1.95	1.94		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.95	2.50		ug/L		125	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	2.07		ug/L		106	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.05		ug/L		105	70 - 130
Dieldrin	0.033		1.95	2.32		ug/L		117	70 - 130
Diethylphthalate	<0.49		1.95	2.33		ug/L		119	70 - 130



# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1 DU**  
**Matrix: Drinking Water**  
**Analysis Batch: 216678**

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,4'-DDE	<0.098		<0.097		ug/L		NC	20
2,4'-DDT	<0.098		<0.097		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.097		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.097		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.097		ug/L		NC	20
4,4'-DDD	<0.098		<0.097		ug/L		NC	20
4,4'-DDE	<0.098		<0.097		ug/L		NC	20
4,4'-DDT	<0.098		<0.097		ug/L		NC	20
Acenaphthene	<0.098		<0.097		ug/L		NC	20
Acenaphthylene	<0.098		<0.097		ug/L		NC	20
Acetochlor	<0.098		<0.097		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.097		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.019		ug/L		NC	20
Atrazine	<0.049		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.019		ug/L		NC	20
beta-BHC	<0.098		<0.097		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.58		ug/L		NC	20
Bromacil	<0.098		<0.097		ug/L		NC	20
Butachlor	<0.049		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.49		ug/L		NC	20
Chlorobenzilate	<0.098		<0.097		ug/L		NC	20
Chloroneb	<0.098		<0.097		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.097		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.019		ug/L		NC	20
delta-BHC	<0.098		<0.097		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.049		ug/L		NC	20
Dieldrin	0.025		0.0275		ug/L		8	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20
Dimethylphthalate	<0.49		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.98		<0.97		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.097		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.097		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.097		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.097		ug/L		NC	20
Endrin	<0.0098		<0.0097		ug/L		NC	20
Endrin aldehyde	<0.098		<0.097		ug/L		NC	20
EPTC	<0.098		<0.097		ug/L		NC	20
Fluoranthene	<0.098		<0.097		ug/L		NC	20
Fluorene	<0.049		<0.049		ug/L		NC	20
gamma-Chlordane	<0.049		<0.049		ug/L		NC	20

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1 DU**  
**Matrix: Drinking Water**  
**Analysis Batch: 216678**

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**  
**Prep Type: Total/NA**  
**Prep Batch: 216414**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Heptachlor	<0.0098		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0098		<0.0097		ug/L		NC	20
Hexachlorobenzene	<0.049		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.049		ug/L		NC	20
Isophorone	<0.098		<0.097		ug/L		NC	20
Lindane	<0.0098		<0.0097		ug/L		NC	20
Malathion	<0.098		<0.097		ug/L		NC	20
Methoxychlor	<0.049		<0.049		ug/L		NC	20
Metolachlor	<0.049		<0.049		ug/L		NC	20
Molinate	<0.098		<0.097		ug/L		NC	20
Naphthalene	<0.098		<0.097		ug/L		NC	20
Parathion	<0.098		<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098		<0.097		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.049		ug/L		NC	20
Pyrene	<0.049		<0.049		ug/L		NC	20
Simazine	<0.049		<0.049		ug/L		NC	20
Terbacil	<0.098		<0.097		ug/L		NC	20
Terbutylazine	<0.098		<0.097		ug/L		NC	20
Thiobencarb	<0.098		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.19		ug/L		NC	20
trans-Nonachlor	<0.049		<0.049		ug/L		NC	20
Trifluralin	<0.098		<0.097		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	91		70 - 130
Triphenylphosphate	100		70 - 130

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

**Lab Sample ID: MB 570-714257/1-A**  
**Matrix: Water**  
**Analysis Batch: 719742**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	03/25/26 08:00	04/05/26 08:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	80		33 - 139	03/25/26 08:00	04/05/26 08:05	1
2-Fluorobiphenyl (Surr)	74		33 - 126	03/25/26 08:00	04/05/26 08:05	1
2-Fluorophenol (Surr)	52		12 - 120	03/25/26 08:00	04/05/26 08:05	1
Nitrobenzene-d5 (Surr)	79		36 - 120	03/25/26 08:00	04/05/26 08:05	1
Phenol-d6 (Surr)	33		10 - 120	03/25/26 08:00	04/05/26 08:05	1
p-Terphenyl-d14 (Surr)	79		47 - 131	03/25/26 08:00	04/05/26 08:05	1

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MB 570-714257/1-A**  
**Matrix: Water**  
**Analysis Batch: 714932**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
2-Methylnaphthalene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Acenaphthene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Acenaphthylene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Anthracene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Benzo[a]anthracene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Benzo[a]pyrene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Chrysene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Fluoranthene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Fluorene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Naphthalene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Phenanthrene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1
Pyrene	<0.20		0.20	ug/L		03/25/26 08:00	03/26/26 06:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	74		28 - 127	03/25/26 08:00	03/26/26 06:17	1
2-Fluorobiphenyl (Surr)	65		31 - 120	03/25/26 08:00	03/26/26 06:17	1
2-Fluorophenol (Surr)	47		17 - 120	03/25/26 08:00	03/26/26 06:17	1
Nitrobenzene-d5 (Surr)	75		27 - 120	03/25/26 08:00	03/26/26 06:17	1
Phenol-d6 (Surr)	27		10 - 120	03/25/26 08:00	03/26/26 06:17	1
p-Terphenyl-d14 (Surr)	77		45 - 120	03/25/26 08:00	03/26/26 06:17	1

**Lab Sample ID: LCS 570-714257/2-A**  
**Matrix: Water**  
**Analysis Batch: 714932**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.4		ug/L		72	47 - 120
2-Methylnaphthalene	20.0	13.5		ug/L		67	43 - 120
Acenaphthene	20.0	17.1		ug/L		85	60 - 132
Acenaphthylene	20.0	16.3		ug/L		82	54 - 126
Anthracene	20.0	16.7		ug/L		84	43 - 120
Benzo[a]anthracene	20.0	17.9		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	16.7		ug/L		84	32 - 148
Benzo[b]fluoranthene	20.0	17.4		ug/L		87	42 - 140
Benzo[g,h,i]perylene	20.0	19.0		ug/L		95	1 - 195
Benzo[k]fluoranthene	20.0	17.5		ug/L		87	25 - 146
Chrysene	20.0	17.6		ug/L		88	44 - 140
Dibenz(a,h)anthracene	20.0	19.9		ug/L		99	1 - 200
Fluoranthene	20.0	16.5		ug/L		83	43 - 121
Fluorene	20.0	17.4		ug/L		87	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	19.0		ug/L		95	1 - 151
Naphthalene	20.0	14.2		ug/L		71	36 - 120

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# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCS 570-714257/2-A**  
**Matrix: Water**  
**Analysis Batch: 714932**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	17.1		ug/L		85	65 - 120
Pyrene	20.0	18.1		ug/L		90	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	86		28 - 127
2-Fluorobiphenyl (Surr)	82		31 - 120
2-Fluorophenol (Surr)	62		17 - 120
Nitrobenzene-d5 (Surr)	61		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	85		45 - 120

**Lab Sample ID: LCSD 570-714257/3-A**  
**Matrix: Water**  
**Analysis Batch: 714932**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
1-Methylnaphthalene	20.0	18.6	*1	ug/L		93	47 - 120	25	20
2-Methylnaphthalene	20.0	16.4		ug/L		82	43 - 120	19	20
Acenaphthene	20.0	16.8		ug/L		84	60 - 132	2	29
Acenaphthylene	20.0	16.6		ug/L		83	54 - 126	2	45
Anthracene	20.0	17.1		ug/L		86	43 - 120	2	40
Benzo[a]anthracene	20.0	17.3		ug/L		87	42 - 133	3	32
Benzo[a]pyrene	20.0	15.8		ug/L		79	32 - 148	6	43
Benzo[b]fluoranthene	20.0	16.7		ug/L		83	42 - 140	4	43
Benzo[g,h,i]perylene	20.0	18.5		ug/L		93	1 - 195	3	61
Benzo[k]fluoranthene	20.0	16.4		ug/L		82	25 - 146	6	38
Chrysene	20.0	17.3		ug/L		87	44 - 140	2	53
Dibenz(a,h)anthracene	20.0	20.0		ug/L		100	1 - 200	1	75
Fluoranthene	20.0	17.6		ug/L		88	43 - 121	6	40
Fluorene	20.0	16.9		ug/L		84	70 - 120	3	23
Indeno[1,2,3-cd]pyrene	20.0	18.6		ug/L		93	1 - 151	2	60
Naphthalene	20.0	16.5		ug/L		83	36 - 120	15	39
Phenanthrene	20.0	17.7		ug/L		89	65 - 120	4	24
Pyrene	20.0	20.0		ug/L		100	70 - 120	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	81		28 - 127
2-Fluorobiphenyl (Surr)	78		31 - 120
2-Fluorophenol (Surr)	62		17 - 120
Nitrobenzene-d5 (Surr)	76		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	91		45 - 120

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204658-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 718659**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.19	*1	19.4	14.2		ug/L		73	36 - 120
2-Methylnaphthalene	<0.19		19.4	13.7		ug/L		70	32 - 124
Acenaphthene	<0.19		19.4	15.8		ug/L		82	47 - 145
Acenaphthylene	<0.19		19.4	16.4		ug/L		84	33 - 145
Anthracene	<0.19		19.4	15.4		ug/L		79	27 - 133
Benzo[a]anthracene	<0.19		19.4	16.8		ug/L		86	33 - 143
Benzo[a]pyrene	<0.19		19.4	17.7		ug/L		91	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	17.2		ug/L		89	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	15.5		ug/L		80	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	16.1		ug/L		83	11 - 162
Chrysene	<0.19		19.4	16.0		ug/L		83	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	16.3		ug/L		84	1 - 227
Fluoranthene	<0.19		19.4	15.8		ug/L		82	26 - 137
Fluorene	<0.19		19.4	15.9		ug/L		82	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	15.9		ug/L		82	1 - 171
Naphthalene	<0.19		19.4	13.2		ug/L		68	21 - 133
Phenanthrene	<0.19		19.4	15.6		ug/L		80	54 - 120
Pyrene	<0.19		19.4	16.9		ug/L		87	52 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	80		28 - 127
2-Fluorobiphenyl (Surr)	80		31 - 120
2-Fluorophenol (Surr)	62		17 - 120
Nitrobenzene-d5 (Surr)	70		27 - 120
Phenol-d6 (Surr)	41		10 - 120
p-Terphenyl-d14 (Surr)	87		45 - 120

**Lab Sample ID: 380-204658-A-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 718659**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 714257**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1-Methylnaphthalene	<0.19	*1	19.6	14.9		ug/L		76	36 - 120	4	30
2-Methylnaphthalene	<0.19		19.6	14.5		ug/L		74	32 - 124	6	30
Acenaphthene	<0.19		19.6	16.9		ug/L		86	47 - 145	6	48
Acenaphthylene	<0.19		19.6	17.3		ug/L		88	33 - 145	6	74
Anthracene	<0.19		19.6	16.6		ug/L		84	27 - 133	7	66
Benzo[a]anthracene	<0.19		19.6	18.2		ug/L		93	33 - 143	8	53
Benzo[a]pyrene	<0.19		19.6	19.5		ug/L		99	17 - 163	10	72
Benzo[b]fluoranthene	<0.19		19.6	18.8		ug/L		96	24 - 159	9	71
Benzo[g,h,i]perylene	<0.19		19.6	16.8		ug/L		85	1 - 219	8	97
Benzo[k]fluoranthene	<0.19		19.6	17.8		ug/L		90	11 - 162	10	63
Chrysene	<0.19		19.6	17.3		ug/L		88	17 - 168	8	87
Dibenz(a,h)anthracene	<0.19		19.6	17.8		ug/L		90	1 - 227	8	126
Fluoranthene	<0.19		19.6	17.0		ug/L		87	26 - 137	7	66
Fluorene	<0.19		19.6	16.7		ug/L		85	59 - 121	5	38
Indeno[1,2,3-cd]pyrene	<0.19		19.6	17.2		ug/L		87	1 - 171	8	99
Naphthalene	<0.19		19.6	13.9		ug/L		71	21 - 133	5	65

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204658-A-1-B MSD**

**Client Sample ID: Matrix Spike Duplicate**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 718659**

**Prep Batch: 714257**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.6	16.8		ug/L		85	54 - 120	7	39
Pyrene	<0.19		19.6	18.2		ug/L		93	52 - 120	7	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	64		17 - 120
Nitrobenzene-d5 (Surr)	72		27 - 120
Phenol-d6 (Surr)	43		10 - 120
p-Terphenyl-d14 (Surr)	92		45 - 120

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

**Lab Sample ID: MB 570-719037/12**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 719037**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/03/26 14:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134		04/03/26 14:33	1

**Lab Sample ID: LCS 570-719037/1010**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 719037**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	424		ug/L		106	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		38 - 134

**Lab Sample ID: LCSD 570-719037/11**

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

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 719037**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	416		ug/L		104	78 - 120	2	10

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

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: MRL 570-719037/1005**  
**Matrix: Water**  
**Analysis Batch: 719037**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	11.9		ug/L		119	50 - 150
<b>Surrogate</b>		<b>MRL %Recovery</b>	<b>MRL Qualifier</b>				<b>Limits</b>
4-Bromofluorobenzene (Surr)		93					38 - 134

**Lab Sample ID: 380-204658-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 719037**

**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	426		ug/L		106	68 - 122
<b>Surrogate</b>		<b>MS %Recovery</b>		<b>MS Qualifier</b>					<b>Limits</b>
4-Bromofluorobenzene (Surr)		106							38 - 134

**Lab Sample ID: 380-204658-B-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 719037**

**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	428		ug/L		107	68 - 122	0	18
<b>Surrogate</b>		<b>MSD %Recovery</b>		<b>MSD Qualifier</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)		121							38 - 134		

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

**Lab Sample ID: MB 570-715739/1-A**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		03/27/26 10:35	04/02/26 11:47	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		03/27/26 10:35	04/02/26 11:47	1
C8-C18	<25		25	ug/L		03/27/26 10:35	04/02/26 11:47	1
<b>Surrogate</b>		<b>MB %Recovery</b>	<b>MB Qualifier</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)		100				03/27/26 10:35	04/02/26 11:47	1

**Lab Sample ID: LCS 570-715739/2-A**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1440		ug/L		90	56 - 127

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: LCS 570-715739/2-A**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

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

**Lab Sample ID: LCSD 570-715739/3-A**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	1600	1470		ug/L	-	92	56 - 127	2	23
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

**Lab Sample ID: MRL 570-715739/4-A**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
Analyte C10-C28	0.0200	0.0255		mg/L	-	127	50 - 150	
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>								

**Lab Sample ID: 380-204658-C-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Analyte C10-C28	<26		1650	1520		ug/L	-	92	70 - 130
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

**Lab Sample ID: 380-204658-C-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 718519**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 715739**

	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	<26		1630	1540		ug/L	-	94	70 - 130	1	20
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											

# QC Association Summary

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

## GC/MS Semi VOA

### Prep Batch: 216414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	
MB 380-216414/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-216414/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-216414/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-216414/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-204658-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-204668-1 DU	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	

### Analysis Batch: 216678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	216414
MB 380-216414/21-A	Method Blank	Total/NA	Water	525.2	216414
LCS 380-216414/23-A	Lab Control Sample	Total/NA	Water	525.2	216414
LCSD 380-216414/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	216414
MRL 380-216414/22-A	Lab Control Sample	Total/NA	Water	525.2	216414
380-204658-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	216414
380-204668-1 DU	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	216414

### Prep Batch: 714257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	625.1	
MB 570-714257/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-714257/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-714257/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-204658-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-204658-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

### Analysis Batch: 714932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-714257/1-A	Method Blank	Total/NA	Water	625.1 SIM	714257
LCS 570-714257/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	714257
LCSD 570-714257/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	714257

### Analysis Batch: 718659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	625.1 SIM	714257
380-204658-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	714257
380-204658-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	714257

### Analysis Batch: 719742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	625.1	714257
MB 570-714257/1-A	Method Blank	Total/NA	Water	625.1	714257

## GC VOA

### Analysis Batch: 719037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	8015B GRO LL	
380-204668-2	TB:MOANALUA WELLS (331-223-TP202)	Total/NA	Water	8015B GRO LL	
MB 570-719037/12	Method Blank	Total/NA	Water	8015B GRO LL	

Eurofins Pomona

# QC Association Summary

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

## GC VOA (Continued)

### Analysis Batch: 719037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-719037/1010	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-719037/11	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-719037/1005	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-204658-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-204658-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

## GC Semi VOA

### Prep Batch: 715739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	3510C	
MB 570-715739/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-715739/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-715739/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-715739/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-204658-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-204658-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 718519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-204668-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	8015B	715739
MB 570-715739/1-A	Method Blank	Total/NA	Water	8015B	715739
LCS 570-715739/2-A	Lab Control Sample	Total/NA	Water	8015B	715739
LCSD 570-715739/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	715739
MRL 570-715739/4-A	Lab Control Sample	Total/NA	Water	8015B	715739
380-204658-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	715739
380-204658-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	715739

# Lab Chronicle

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

Job ID: 380-204668-1  
SDG: Weekly: Moanalua Wells

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

**Lab Sample ID: 380-204668-1**

**Date Collected: 03/23/26 10:26**

**Matrix: Drinking Water**

**Date Received: 03/25/26 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			216414	KRD3	EA POM	03/29/26 09:56
Total/NA	Analysis	525.2		1	216678	Q8LA	EA POM	03/30/26 15:15
Total/NA	Prep	625.1			714257	BN8X	EET CAL 4	03/25/26 21:49
Total/NA	Analysis	625.1		1	719742	PQS1	EET CAL 4	04/05/26 14:33
Total/NA	Prep	625.1			714257	BN8X	EET CAL 4	03/25/26 21:49
Total/NA	Analysis	625.1 SIM		1	718659	PQS1	EET CAL 4	04/02/26 21:12
Total/NA	Analysis	8015B GRO LL		1	719037	A9VE	EET CAL 4	04/03/26 19:20
Total/NA	Prep	3510C			715739	EP2G	EET CAL 4	03/27/26 10:35
Total/NA	Analysis	8015B		1	718519	NR	EET CAL 4	04/02/26 15:23

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

**Lab Sample ID: 380-204668-2**

**Date Collected: 03/23/26 10:26**

**Matrix: Water**

**Date Received: 03/25/26 10:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	719037	A9VE	EET CAL 4	04/03/26 19:45

**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: 380-204668-1  
SDG: Weekly: Moanalua Wells

## 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 *
<p>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.</p>			
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	04-05-26
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: 380-204668-1  
SDG: Weekly: 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	02-02-27
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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- 14
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- 16

# Method Summary

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

Job ID: 380-204668-1  
SDG: Weekly: 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 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: 380-204668-1  
SDG: Weekly: Moanalua Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-204668-1	MOANALUA WELLS (331-223-TP202)	Drinking Water	03/23/26 10:26	03/25/26 10:00	HI0000331
380-204668-2	TB:MOANALUA WELLS (331-223-TP202)	Water	03/23/26 10:26	03/25/26 10:00	

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ORIGIN ID HIKA (808) 748-5840  
BWS CHEMLAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S. BERETANIA ST.  
CHEMICAL LABORATORY  
HONOLULU HI 96843  
UNITED STATES US

SHIP DATE: 24MAR26  
ACTWGT: 57.00 LB  
CAD: 258050552/INET4535

BILL RECIPIENT

TO EUROFINS RECEIVING DEPARTMENT  
EUROFINS DRINKING WATER TESTING  
941 CORPORATE CENTER DR

POMONA CA 91768

(626) 386-1100 REF

PO- INV PO- DEPT.



WED - 25 MAR 10:30A  
PRIORITY OVERNIGHT

4 of 5

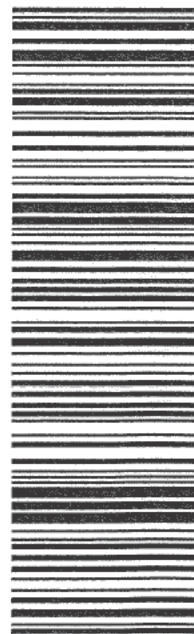
MPS# 8899 4033 7857

0263 Mstr# 8899 4033 7824

WM ONTA

91768

CA-US ONT



RECEIVED BY: KRISTINE TRAN 84AP

3/25/26 @ 0956

(630A) 5.0-0.0 = 5.0 GEL FROZEN

After printing this label  
1 Fold the printed page along the horizontal line  
2 Place label in shipping pouch and affix it to your shipment

58KJ57A/E5/484B

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## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-204668-1  
SDG Number: Weekly: Moanalua Wells

**Login Number: 204668**

**List Number: 1**

**Creator: Tran, Kristine**

**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: 380-204668-1  
SDG Number: Weekly: Moanalua Wells

**Login Number: 204668**  
**List Number: 2**  
**Creator: Szyborski, Jessica**

**List Source: Eurofins Calscience**  
**List Creation: 03/25/26 08:24 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	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	2.6/2.7
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.	False	Incorrect number of containers
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

