

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

RED-HILL  
Weekly: Ka'amilo Wells Pump 1  
RUSH Weekly Red Hill

## JOB NUMBER

380-185033-1

# Eurofins Eaton Analytical Pomona

## Job Notes

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

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

## Compliance Statement

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

## Authorization



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# Definitions/Glossary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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: 380-185033-1

**Job ID: 380-185033-1**

**Eurofins Eaton Analytical Pomona**

## Job Narrative 380-185033-1

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 11/28/2025 10:12 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 3.0°C.

### Receipt Exceptions

COC has collection time of 10:40 while containers have time of 10:15. Logged per COC.

Ka'amilo Wells Pump 1 (380-185033-1) and TB: Ka'amilo Wells Pump 1 (380-185033-2)

### GC/MS Semi VOA

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

### Gasoline Range Organics

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

### Diesel Range Organics

Method 8015B\_DRO\_LL\_CS: The method reporting limit check (MRL) for preparation batch 570-663324 and analytical batch 570-666060 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.

# Detection Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## Client Sample ID: Ka'amilo Wells Pump 1

## Lab Sample ID: 380-185033-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.080		0.0096	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.012		0.0096	ug/L	1		525.2	Total/NA

## Client Sample ID: TB: Ka'amilo Wells Pump 1

## Lab Sample ID: 380-185033-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona



# Client Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

**Client Sample ID: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-1**

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2,4'-DDD	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2,4'-DDE	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2,4'-DDT	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
2-Methylnaphthalene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
4,4'-DDD	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
4,4'-DDE	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
4,4'-DDT	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Acenaphthene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Acenaphthylene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Acetochlor	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Alachlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
alpha-BHC	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
alpha-Chlordane	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Anthracene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 16:04	1
Atrazine	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Benz(a)anthracene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Benzo[a]pyrene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 16:04	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 16:04	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 16:04	1
beta-BHC	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		12/02/25 08:58	12/03/25 16:04	1
Bromacil	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Butachlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Butylbenzylphthalate	<0.48		0.48	ug/L		12/02/25 08:58	12/03/25 16:04	1
Chlorobenzilate	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Chloroneb	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Chlorpyrifos	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Chrysene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 16:04	1
delta-BHC	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		12/02/25 08:58	12/03/25 16:04	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
<b>Dieldrin</b>	<b>0.080</b>		0.0096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Diethylphthalate	<0.48	+	0.48	ug/L		12/02/25 08:58	12/03/25 16:04	1
Dimethylphthalate	<0.48		0.48	ug/L		12/02/25 08:58	12/03/25 16:04	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		12/02/25 08:58	12/03/25 16:04	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Endosulfan sulfate	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Endrin	<0.0096		0.0096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Endrin aldehyde	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
EPTC	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Fluoranthene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1

# Client Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

**Client Sample ID: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-1**

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
gamma-Chlordane	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Heptachlor	<0.0096		0.0096	ug/L		12/02/25 08:58	12/03/25 16:04	1
<b>Heptachlor epoxide (isomer B)</b>	<b>0.012</b>		0.0096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Hexachlorobenzene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Isophorone	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Lindane	<0.0096		0.0096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Malathion	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Methoxychlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Metolachlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Molinate	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Naphthalene	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Parathion	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Phenanthrene	<0.038		0.038	ug/L		12/02/25 08:58	12/03/25 16:04	1
Propachlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Pyrene	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Simazine	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Terbacil	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Terbutylazine	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Thiobencarb	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		12/02/25 08:58	12/03/25 16:04	1
trans-Nonachlor	<0.048		0.048	ug/L		12/02/25 08:58	12/03/25 16:04	1
Trifluralin	<0.096		0.096	ug/L		12/02/25 08:58	12/03/25 16:04	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	12/02/25 08:58	12/03/25 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	12/02/25 08:58	12/03/25 16:04	1
Perylene-d12	95		70 - 130	12/02/25 08:58	12/03/25 16:04	1
Triphenylphosphate	107		70 - 130	12/02/25 08:58	12/03/25 16:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
2-Methylnaphthalene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Acenaphthene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Acenaphthylene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Anthracene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Benzo[a]anthracene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Benzo[a]pyrene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Benzo[b]fluoranthene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Benzo[g,h,i]perylene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Benzo[k]fluoranthene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Chrysene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Dibenz(a,h)anthracene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Fluoranthene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

**Client Sample ID: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-1**

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Indeno[1,2,3-cd]pyrene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Naphthalene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Phenanthrene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1
Pyrene	<0.21		0.21	ug/L		12/01/25 08:21	12/11/25 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	83		28 - 127	12/01/25 08:21	12/11/25 13:19	1
2-Fluorobiphenyl (Surr)	85		31 - 120	12/01/25 08:21	12/11/25 13:19	1
2-Fluorophenol (Surr)	53		17 - 120	12/01/25 08:21	12/11/25 13:19	1
Nitrobenzene-d5 (Surr)	86		27 - 120	12/01/25 08:21	12/11/25 13:19	1
Phenol-d6 (Surr)	34		10 - 120	12/01/25 08:21	12/11/25 13:19	1
p-Terphenyl-d14 (Surr)	77		45 - 120	12/01/25 08:21	12/11/25 13:19	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	12/01/25 08:21	12/11/25 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		33 - 139	12/01/25 08:21	12/11/25 12:35	1
2-Fluorobiphenyl (Surr)	88		33 - 126	12/01/25 08:21	12/11/25 12:35	1
2-Fluorophenol (Surr)	52		12 - 120	12/01/25 08:21	12/11/25 12:35	1
Nitrobenzene-d5 (Surr)	91		36 - 120	12/01/25 08:21	12/11/25 12:35	1
Phenol-d6 (Surr)	30		10 - 120	12/01/25 08:21	12/11/25 12:35	1
p-Terphenyl-d14 (Surr)	85		47 - 131	12/01/25 08:21	12/11/25 12:35	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			12/07/25 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		38 - 134		12/07/25 21:00	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)	<28		28	ug/L		12/01/25 16:05	12/07/25 05:30	1
Motor Oil Range Organics [C24-C36]	<28		28	ug/L		12/01/25 16:05	12/07/25 05:30	1
C8-C18	<28		28	ug/L		12/01/25 16:05	12/07/25 05:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	103		60 - 130	12/01/25 16:05	12/07/25 05:30	1

**Client Sample ID: TB: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-2**

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

**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			12/08/25 00:40	1

# Client Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

**Client Sample ID: TB: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-2**

**Date Collected: 11/24/25 10:40**

**Matrix: Water**

**Date Received: 11/28/25 10:12**

<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)	92		38 - 134		12/08/25 00:40	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: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

**Client Sample ID: Ka'amilo Wells Pump 1**

**Lab Sample ID: 380-185033-1**

## 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	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0096		ug/L	2	0.0096	525.2	Total/NA
Heptachlor	<0.0096		ug/L	0.4	0.0096	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.012		ug/L	0.2	0.0096	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Methoxychlor	<0.048		ug/L	40	0.048	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.21		ug/L	0.2	0.21	625.1 SIM	Total/NA

# Surrogate Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## 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)
380-185033-1	Ka'amilo Wells Pump 1	98	95	107
380-185034-I-1-A MS	Matrix Spike	97	99	109
380-185034-J-1-A MSD	Matrix Spike Duplicate	98	98	112
LCS 380-189440/22-A	Lab Control Sample	97	95	108
MB 380-189440/20-A	Method Blank	95	89	104
MRL 380-189440/21-A	Lab Control Sample	97	94	106

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

## 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)
380-185033-1	Ka'amilo Wells Pump 1	73	88	52	91	30	85
MB 570-663011/1-A	Method Blank	75	84	53	89	33	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 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)
380-185033-1	Ka'amilo Wells Pump 1	83	85	53	86	34	77
380-185035-A-1-A MS	Matrix Spike	83	86	61	71	40	84
380-185035-A-1-B MSD	Matrix Spike Duplicate	81	79	53	65	35	84
LCS 570-663011/2-A	Lab Control Sample	85	84	63	71	43	85
LCSD 570-663011/3-A	Lab Control Sample Dup	81	86	65	70	43	82
MB 570-663011/1-A	Method Blank	88	80	52	82	34	76

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

# Surrogate Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## 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)
380-185033-1	Ka'amilo Wells Pump 1	94
380-185033-2	TB: Ka'amilo Wells Pump 1	92
380-185035-C-1 MS	Matrix Spike	91
380-185035-C-1 MSD	Matrix Spike Duplicate	91
LCS 570-666187/4	Lab Control Sample	83
LCSD 570-666187/5	Lab Control Sample Dup	85
MB 570-666187/6	Method Blank	87
MRL 570-666187/3	Lab Control Sample	81

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (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)
380-185033-1	Ka'amilo Wells Pump 1	103
380-185076-A-1-A MS	Matrix Spike	98
380-185076-B-1-A MSD	Matrix Spike Duplicate	115
LCS 570-663324/2-A	Lab Control Sample	109
LCSD 570-663324/3-A	Lab Control Sample Dup	106
MB 570-663324/1-A	Method Blank	99
MRL 570-663324/4-A	Lab Control Sample	117

#### Surrogate Legend

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MB 380-189440/20-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2,4'-DDD	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2,4'-DDE	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2,4'-DDT	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
2-Methylnaphthalene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
4,4'-DDD	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
4,4'-DDE	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
4,4'-DDT	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Acenaphthene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Acenaphthylene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Acetochlor	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Alachlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
alpha-BHC	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
alpha-Chlordane	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Anthracene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 11:42	1
Atrazine	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Benz(a)anthracene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Benzo[a]pyrene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 11:42	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 11:42	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 11:42	1
beta-BHC	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		12/02/25 08:58	12/03/25 11:42	1
Bromacil	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Butachlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Butylbenzylphthalate	<0.49		0.49	ug/L		12/02/25 08:58	12/03/25 11:42	1
Chlorobenzilate	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Chloroneb	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Chlorpyrifos	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Chrysene	<0.019		0.019	ug/L		12/02/25 08:58	12/03/25 11:42	1
delta-BHC	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		12/02/25 08:58	12/03/25 11:42	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Dieldrin	<0.0097		0.0097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Diethylphthalate	<0.49		0.49	ug/L		12/02/25 08:58	12/03/25 11:42	1
Dimethylphthalate	<0.49		0.49	ug/L		12/02/25 08:58	12/03/25 11:42	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		12/02/25 08:58	12/03/25 11:42	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Endosulfan sulfate	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Endrin	<0.0097		0.0097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Endrin aldehyde	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
EPTC	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1

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# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MB 380-189440/20-A**

**Matrix: Water**

**Analysis Batch: 189744**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 189440**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Fluorene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
gamma-Chlordane	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Heptachlor	<0.0097		0.0097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Hexachlorobenzene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Isophorone	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Lindane	<0.0097		0.0097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Malathion	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Methoxychlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Metolachlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Molinate	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Naphthalene	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Parathion	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Phenanthrene	<0.039		0.039	ug/L		12/02/25 08:58	12/03/25 11:42	1
Propachlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Pyrene	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Simazine	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Terbacil	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Terbutylazine	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Thiobencarb	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		12/02/25 08:58	12/03/25 11:42	1
trans-Nonachlor	<0.049		0.049	ug/L		12/02/25 08:58	12/03/25 11:42	1
Trifluralin	<0.097		0.097	ug/L		12/02/25 08:58	12/03/25 11:42	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.533	T J	ug/L		3.83	N/A	12/02/25 08:58	12/03/25 11:42	1
9-Octadecenamide, (Z)-	5.08	T J N	ug/L		7.79	301-02-0	12/02/25 08:58	12/03/25 11:42	1
Octadecanamide	0.583	T J N	ug/L		7.89	124-26-5	12/02/25 08:58	12/03/25 11:42	1
Unknown	0.851	T J	ug/L		14.75	N/A	12/02/25 08:58	12/03/25 11:42	1
Unknown	0.499	T J	ug/L		15.61	N/A	12/02/25 08:58	12/03/25 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	12/02/25 08:58	12/03/25 11:42	1
Perylene-d12	89		70 - 130	12/02/25 08:58	12/03/25 11:42	1
Triphenylphosphate	104		70 - 130	12/02/25 08:58	12/03/25 11:42	1

**Lab Sample ID: LCS 380-189440/22-A**

**Matrix: Water**

**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 189440**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.95	1.77		ug/L		91	70 - 130
2,4'-DDD	1.95	2.00		ug/L		103	70 - 130
2,4'-DDE	1.95	1.94		ug/L		100	70 - 130

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# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: LCS 380-189440/22-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDT	1.95	1.97		ug/L		101	70 - 130
2,4-Dinitrotoluene	1.95	1.93		ug/L		99	70 - 130
2,6-Dinitrotoluene	1.95	1.91		ug/L		98	70 - 130
2-Methylnaphthalene	1.95	1.79		ug/L		92	70 - 130
4,4'-DDD	1.95	2.02		ug/L		104	70 - 130
4,4'-DDE	1.95	1.93		ug/L		99	70 - 130
4,4'-DDT	1.95	1.82		ug/L		93	70 - 130
Acenaphthene	1.95	1.91		ug/L		98	70 - 130
Acenaphthylene	1.95	1.94		ug/L		100	70 - 130
Acetochlor	1.95	2.08		ug/L		107	70 - 130
Alachlor	1.95	2.06		ug/L		106	70 - 130
alpha-BHC	1.95	1.92		ug/L		99	70 - 130
alpha-Chlordane	1.95	2.13		ug/L		110	70 - 130
Anthracene	1.95	1.72		ug/L		88	70 - 130
Atrazine	1.95	2.14		ug/L		110	70 - 130
Benz(a)anthracene	1.95	1.80		ug/L		92	70 - 130
Benzo[a]pyrene	1.95	1.89		ug/L		97	70 - 130
Benzo[b]fluoranthene	1.95	1.90		ug/L		98	70 - 130
Benzo[g,h,i]perylene	1.95	1.88		ug/L		96	70 - 130
Benzo[k]fluoranthene	1.95	1.88		ug/L		97	70 - 130
beta-BHC	1.95	1.94		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.79		ug/L		92	70 - 130
Bromacil	1.95	1.87		ug/L		96	70 - 130
Butachlor	1.95	2.03		ug/L		104	70 - 130
Butylbenzylphthalate	1.95	2.20		ug/L		113	70 - 130
Chlorobenzilate	1.95	1.80		ug/L		93	70 - 130
Chloroneb	1.95	1.83		ug/L		94	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	2.25		ug/L		115	70 - 130
Chlorpyrifos	1.95	2.13		ug/L		109	70 - 130
Chrysene	1.95	1.84		ug/L		94	70 - 130
delta-BHC	1.95	1.87		ug/L		96	70 - 130
Di(2-ethylhexyl)adipate	1.95	2.00		ug/L		103	70 - 130
Dibenz(a,h)anthracene	1.95	1.84		ug/L		95	70 - 130
Diclorvos (DDVP)	1.95	1.88		ug/L		96	70 - 130
Dieldrin	1.95	1.96		ug/L		101	70 - 130
Diethylphthalate	1.95	7.68	*+	ug/L		394	70 - 130
Dimethylphthalate	1.95	2.01		ug/L		103	70 - 130
Di-n-butyl phthalate	3.90	4.17		ug/L		107	70 - 130
Di-n-octyl phthalate	1.95	1.80		ug/L		92	70 - 130
Endosulfan I (Alpha)	1.95	1.87		ug/L		96	70 - 130
Endosulfan II (Beta)	1.95	1.93		ug/L		99	70 - 130
Endosulfan sulfate	1.95	2.14		ug/L		110	70 - 130
Endrin	1.95	2.04		ug/L		105	70 - 130
Endrin aldehyde	1.95	1.77		ug/L		91	60 - 130
EPTC	1.95	2.02		ug/L		104	70 - 130
Fluoranthene	1.95	2.04		ug/L		105	70 - 130
Fluorene	1.95	1.91		ug/L		98	70 - 130
gamma-Chlordane	1.95	2.15		ug/L		110	70 - 130
Heptachlor	1.95	2.01		ug/L		103	70 - 130

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# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: LCS 380-189440/22-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (isomer B)	1.95	1.99		ug/L		102	70 - 130
Hexachlorobenzene	1.95	2.00		ug/L		103	70 - 130
Hexachlorocyclopentadiene	1.95	1.90		ug/L		97	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	1.87		ug/L		96	70 - 130
Isophorone	1.95	1.98		ug/L		102	70 - 130
Lindane	1.95	1.89		ug/L		97	70 - 130
Malathion	1.95	1.89		ug/L		97	70 - 130
Methoxychlor	1.95	2.01		ug/L		103	70 - 130
Metolachlor	1.95	1.93		ug/L		99	70 - 130
Molinate	1.95	2.02		ug/L		104	70 - 130
Naphthalene	1.95	1.84		ug/L		94	70 - 130
Parathion	1.95	2.27		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	1.95	2.03		ug/L		104	70 - 130
Phenanthrene	1.95	1.89		ug/L		97	70 - 130
Propachlor	1.95	2.10		ug/L		108	70 - 130
Pyrene	1.95	2.00		ug/L		103	70 - 130
Simazine	1.95	1.92		ug/L		99	70 - 130
Terbacil	1.95	2.08		ug/L		107	70 - 130
Terbutylazine	1.95	2.19		ug/L		113	70 - 130
Thiobencarb	1.95	2.16		ug/L		111	70 - 130
trans-Nonachlor	1.95	2.00		ug/L		103	70 - 130
Trifluralin	1.95	2.03		ug/L		104	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	108		70 - 130

**Lab Sample ID: MRL 380-189440/21-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0972	0.122		ug/L		126	50 - 150
2,4'-DDD	0.0972	0.0879	J	ug/L		90	50 - 150
2,4'-DDE	0.0972	0.103		ug/L		106	50 - 150
2,4'-DDT	0.0972	0.0939	J	ug/L		97	50 - 150
2,4-Dinitrotoluene	0.0972	0.0956	J	ug/L		98	50 - 150
2,6-Dinitrotoluene	0.0972	0.112		ug/L		115	50 - 150
2-Methylnaphthalene	0.0972	0.113		ug/L		116	50 - 150
4,4'-DDD	0.0972	0.0970		ug/L		100	50 - 150
4,4'-DDE	0.0972	0.0979		ug/L		101	50 - 150
4,4'-DDT	0.0972	0.112		ug/L		116	50 - 150
Acenaphthene	0.0972	0.0941	J	ug/L		97	50 - 150
Acenaphthylene	0.0972	0.0997		ug/L		103	50 - 150
Acetochlor	0.0972	0.119		ug/L		122	50 - 150
Alachlor	0.0486	0.0582		ug/L		120	50 - 150
alpha-BHC	0.0972	0.103		ug/L		106	50 - 150

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# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MRL 380-189440/21-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
alpha-Chlordane	0.0243	<0.028		ug/L		103	50 - 150
Anthracene	0.0194	0.0229		ug/L		118	50 - 150
Atrazine	0.0486	0.0488	J	ug/L		100	50 - 150
Benz(a)anthracene	0.0486	0.0538		ug/L		111	50 - 150
Benzo[a]pyrene	0.0194	0.0216		ug/L		111	50 - 150
Benzo[b]fluoranthene	0.0194	0.0215		ug/L		111	50 - 150
Benzo[g,h,i]perylene	0.0486	0.0498		ug/L		102	50 - 150
Benzo[k]fluoranthene	0.0194	0.0224		ug/L		115	50 - 150
beta-BHC	0.0972	0.112		ug/L		115	50 - 150
Bis(2-ethylhexyl) phthalate	0.583	0.618		ug/L		106	50 - 150
Bromacil	0.0972	0.102		ug/L		105	50 - 150
Butachlor	0.0486	0.0632		ug/L		130	50 - 150
Butylbenzylphthalate	0.486	0.639		ug/L		132	50 - 150
Chlorobenzilate	0.0972	0.0946	J	ug/L		97	50 - 150
Chloroneb	0.0972	0.105		ug/L		108	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0972	0.0952	J	ug/L		98	50 - 150
Chlorpyrifos	0.0486	0.0510		ug/L		105	50 - 150
Chrysene	0.0194	0.0182	J	ug/L		94	50 - 150
delta-BHC	0.0972	0.0984		ug/L		101	50 - 150
Di(2-ethylhexyl)adipate	0.583	0.743		ug/L		127	50 - 150
Dibenz(a,h)anthracene	0.0486	0.0479	J	ug/L		99	50 - 150
Diclorvos (DDVP)	0.0486	0.0558		ug/L		115	50 - 150
Dieldrin	0.00972	0.00849	J	ug/L		87	50 - 150
Diethylphthalate	0.486	0.569		ug/L		117	50 - 150
Dimethylphthalate	0.486	0.534		ug/L		110	50 - 150
Di-n-butyl phthalate	0.486	0.532	J	ug/L		110	49 - 243
Di-n-octyl phthalate	0.0972	0.0954	J	ug/L		98	50 - 150
Endosulfan I (Alpha)	0.0972	0.105		ug/L		108	50 - 150
Endosulfan II (Beta)	0.0972	0.112		ug/L		116	50 - 150
Endosulfan sulfate	0.0972	0.105		ug/L		108	50 - 150
Endrin	0.00972	0.00964	J	ug/L		99	50 - 150
Endrin aldehyde	0.0972	0.111		ug/L		114	50 - 150
EPTC	0.0972	0.106		ug/L		109	50 - 150
Fluoranthene	0.0972	0.101		ug/L		104	50 - 150
Fluorene	0.0486	0.0530		ug/L		109	50 - 150
gamma-Chlordane	0.0243	0.0236	J	ug/L		97	50 - 150
Heptachlor	0.00972	0.0109		ug/L		112	50 - 150
Heptachlor epoxide (isomer B)	0.00972	0.0121		ug/L		125	50 - 150
Hexachlorobenzene	0.0486	0.0551		ug/L		113	50 - 150
Hexachlorocyclopentadiene	0.0486	0.0464	J	ug/L		96	50 - 150
Indeno[1,2,3-cd]pyrene	0.0486	0.0514		ug/L		106	50 - 150
Isophorone	0.0972	0.120		ug/L		124	50 - 150
Lindane	0.00972	0.00865	J	ug/L		89	50 - 150
Malathion	0.0972	0.0984		ug/L		101	50 - 150
Methoxychlor	0.0486	0.0522		ug/L		107	50 - 150
Metolachlor	0.0486	0.0616		ug/L		127	50 - 150
Molinate	0.0972	0.107		ug/L		110	50 - 150
Naphthalene	0.0972	0.103		ug/L		106	50 - 150
Parathion	0.0972	0.0924	J	ug/L		95	50 - 150

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MRL 380-189440/21-A**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Pendimethalin (Penoxaline)	0.0972	0.0933	J	ug/L		96	50 - 150
Phenanthrene	0.0389	0.0394		ug/L		101	50 - 150
Propachlor	0.0486	0.0568		ug/L		117	50 - 150
Pyrene	0.0486	0.0512		ug/L		105	50 - 150
Simazine	0.0486	0.0419	J	ug/L		86	50 - 150
Terbacil	0.0972	0.110		ug/L		113	50 - 150
Terbutylazine	0.0972	0.104		ug/L		107	50 - 150
Thiobencarb	0.0972	0.108		ug/L		111	50 - 150
trans-Nonachlor	0.0243	<0.025		ug/L		102	50 - 150
Trifluralin	0.0972	0.108		ug/L		111	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	106		70 - 130

**Lab Sample ID: 380-185034-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.96	1.79		ug/L		91	70 - 130
2,4'-DDD	<0.098		1.96	1.93		ug/L		99	70 - 130
2,4'-DDE	<0.098		1.96	1.84		ug/L		94	70 - 130
2,4'-DDT	<0.098		1.96	1.87		ug/L		96	70 - 130
2,4-Dinitrotoluene	<0.098		1.96	2.04		ug/L		105	70 - 130
2,6-Dinitrotoluene	<0.098		1.96	2.04		ug/L		104	70 - 130
2-Methylnaphthalene	<0.098		1.96	1.83		ug/L		93	70 - 130
4,4'-DDD	<0.098		1.96	1.98		ug/L		101	70 - 130
4,4'-DDE	<0.098		1.96	1.83		ug/L		93	70 - 130
4,4'-DDT	<0.098		1.96	1.71		ug/L		87	70 - 130
Acenaphthene	<0.098		1.96	1.91		ug/L		98	70 - 130
Acenaphthylene	<0.098		1.96	1.95		ug/L		100	70 - 130
Acetochlor	<0.098		1.96	2.09		ug/L		107	70 - 130
Alachlor	<0.049		1.96	2.06		ug/L		106	70 - 130
alpha-BHC	<0.098		1.96	1.92		ug/L		98	70 - 130
alpha-Chlordane	<0.049		1.96	2.07		ug/L		106	70 - 130
Anthracene	<0.020		1.96	1.42		ug/L		73	70 - 130
Atrazine	<0.049		1.96	2.07		ug/L		106	70 - 130
Benz(a)anthracene	<0.049		1.96	1.74		ug/L		89	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.78		ug/L		91	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	1.85		ug/L		95	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	1.96		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	1.89		ug/L		97	70 - 130
beta-BHC	<0.098		1.96	1.92		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.83		ug/L		94	70 - 130
Bromacil	<0.098		1.96	2.06		ug/L		105	70 - 130
Butachlor	<0.049		1.96	2.09		ug/L		107	70 - 130

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: 380-185034-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS Qualifier	Unit	D	%Rec	%Rec Limits
	Result			Result					
Butylbenzylphthalate	<0.49		1.96	2.25		ug/L		115	70 - 130
Chlorobenzilate	<0.098		1.96	1.85		ug/L		95	70 - 130
Chloroneb	<0.098		1.96	1.86		ug/L		95	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.96	2.37		ug/L		121	70 - 130
Chlorpyrifos	<0.049		1.96	2.14		ug/L		109	70 - 130
Chrysene	<0.020		1.96	1.88		ug/L		96	70 - 130
delta-BHC	<0.098		1.96	1.89		ug/L		96	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	1.92		ug/L		98	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.90		ug/L		97	70 - 130
Diclorvos (DDVP)	<0.049		1.96	1.94		ug/L		99	70 - 130
Dieldrin	<0.0098		1.96	1.99		ug/L		102	70 - 130
Diethylphthalate	<0.49	*+	1.96	2.10		ug/L		107	70 - 130
Dimethylphthalate	<0.49		1.96	2.05		ug/L		105	70 - 130
Di-n-butyl phthalate	<0.98		3.91	4.19		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.098		1.96	1.82		ug/L		93	70 - 130
Endosulfan I (Alpha)	<0.098		1.96	1.84		ug/L		94	70 - 130
Endosulfan II (Beta)	<0.098		1.96	1.94		ug/L		99	70 - 130
Endosulfan sulfate	<0.098		1.96	2.14		ug/L		110	70 - 130
Endrin	<0.0098		1.96	2.09		ug/L		107	70 - 130
Endrin aldehyde	<0.098		1.96	1.51		ug/L		77	60 - 130
EPTC	<0.098		1.96	2.04		ug/L		104	70 - 130
Fluoranthene	<0.098		1.96	2.07		ug/L		106	70 - 130
Fluorene	<0.049		1.96	1.93		ug/L		99	70 - 130
gamma-Chlordane	<0.049		1.96	2.07		ug/L		106	70 - 130
Heptachlor	<0.0098		1.96	2.00		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		1.96	2.00		ug/L		102	70 - 130
Hexachlorobenzene	<0.049		1.96	2.02		ug/L		104	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	1.99		ug/L		102	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.96		ug/L		100	70 - 130
Isophorone	<0.098		1.96	2.02		ug/L		103	70 - 130
Lindane	<0.0098		1.96	1.90		ug/L		97	70 - 130
Malathion	<0.098		1.96	1.94		ug/L		99	70 - 130
Methoxychlor	<0.049		1.96	2.10		ug/L		107	70 - 130
Metolachlor	<0.049		1.96	1.95		ug/L		100	70 - 130
Molinate	<0.098		1.96	2.05		ug/L		105	70 - 130
Naphthalene	<0.098		1.96	1.86		ug/L		95	70 - 130
Parathion	<0.098		1.96	2.27		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.96	2.19		ug/L		112	70 - 130
Phenanthrene	<0.039		1.96	1.92		ug/L		98	70 - 130
Propachlor	<0.049		1.96	2.14		ug/L		110	70 - 130
Pyrene	<0.049		1.96	2.04		ug/L		104	70 - 130
Simazine	<0.049		1.96	1.98		ug/L		101	70 - 130
Terbacil	<0.098		1.96	2.16		ug/L		111	70 - 130
Terbutylazine	<0.098		1.96	2.17		ug/L		111	70 - 130
Thiobencarb	<0.098		1.96	2.17		ug/L		111	70 - 130
trans-Nonachlor	<0.049		1.96	1.89		ug/L		96	70 - 130
Trifluralin	<0.098		1.96	2.10		ug/L		107	70 - 130

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: 380-185034-I-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	109		70 - 130

**Lab Sample ID: 380-185034-J-1-A MSD**  
**Matrix: Water**  
**Analysis Batch: 189744**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 189440**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
1-Methylnaphthalene	<0.098		1.95	1.83		ug/L		93	70 - 130	2	20	
2,4'-DDD	<0.098		1.95	1.96		ug/L		101	70 - 130	1	20	
2,4'-DDE	<0.098		1.95	1.83		ug/L		94	70 - 130	0	20	
2,4'-DDT	<0.098		1.95	1.86		ug/L		96	70 - 130	0	20	
2,4-Dinitrotoluene	<0.098		1.95	2.07		ug/L		107	70 - 130	1	20	
2,6-Dinitrotoluene	<0.098		1.95	2.09		ug/L		107	70 - 130	2	20	
2-Methylnaphthalene	<0.098		1.95	1.81		ug/L		92	70 - 130	1	20	
4,4'-DDD	<0.098		1.95	2.00		ug/L		103	70 - 130	1	20	
4,4'-DDE	<0.098		1.95	1.82		ug/L		93	70 - 130	0	20	
4,4'-DDT	<0.098		1.95	1.72		ug/L		88	70 - 130	1	20	
Acenaphthene	<0.098		1.95	1.91		ug/L		98	70 - 130	0	20	
Acenaphthylene	<0.098		1.95	1.94		ug/L		100	70 - 130	1	20	
Acetochlor	<0.098		1.95	2.13		ug/L		109	70 - 130	2	20	
Alachlor	<0.049		1.95	2.13		ug/L		110	70 - 130	3	20	
alpha-BHC	<0.098		1.95	1.94		ug/L		100	70 - 130	1	20	
alpha-Chlordane	<0.049		1.95	2.09		ug/L		107	70 - 130	1	20	
Anthracene	<0.020		1.95	1.45		ug/L		74	70 - 130	2	20	
Atrazine	<0.049		1.95	2.13		ug/L		110	70 - 130	3	20	
Benz(a)anthracene	<0.049		1.95	1.72		ug/L		89	70 - 130	1	20	
Benzo[a]pyrene	<0.020		1.95	1.83		ug/L		94	70 - 130	3	20	
Benzo[b]fluoranthene	<0.020		1.95	1.91		ug/L		98	70 - 130	3	20	
Benzo[g,h,i]perylene	<0.049		1.95	2.00		ug/L		103	70 - 130	2	20	
Benzo[k]fluoranthene	<0.020		1.95	1.83		ug/L		94	70 - 130	4	20	
beta-BHC	<0.098		1.95	1.94		ug/L		100	70 - 130	1	20	
Bis(2-ethylhexyl) phthalate	<0.59		1.95	1.79		ug/L		92	70 - 130	2	20	
Bromacil	<0.098		1.95	2.11		ug/L		108	70 - 130	2	20	
Butachlor	<0.049		1.95	2.13		ug/L		110	70 - 130	2	20	
Butylbenzylphthalate	<0.49		1.95	2.27		ug/L		117	70 - 130	1	20	
Chlorobenzilate	<0.098		1.95	1.91		ug/L		98	70 - 130	3	20	
Chloroneb	<0.098		1.95	1.86		ug/L		96	70 - 130	0	20	
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.29		ug/L		118	70 - 130	3	20	
Chlorpyrifos	<0.049		1.95	2.13		ug/L		109	70 - 130	1	20	
Chrysene	<0.020		1.95	1.85		ug/L		95	70 - 130	2	20	
delta-BHC	<0.098		1.95	1.91		ug/L		98	70 - 130	2	20	
Di(2-ethylhexyl)adipate	<0.59		1.95	1.91		ug/L		98	70 - 130	1	20	
Dibenz(a,h)anthracene	<0.049		1.95	1.93		ug/L		99	70 - 130	2	20	
Diclorvos (DDVP)	<0.049		1.95	1.93		ug/L		99	70 - 130	0	20	
Dieldrin	<0.0098		1.95	2.04		ug/L		105	70 - 130	2	20	
Diethylphthalate	<0.49	*+	1.95	2.14		ug/L		110	70 - 130	2	20	



# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MB 570-663011/1-A**  
**Matrix: Water**  
**Analysis Batch: 668191**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>MB MB Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>	<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	75		33 - 139				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	84		33 - 126				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	53		12 - 120				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	89		36 - 120				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	33		10 - 120				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	83		47 - 131				<i>12/01/25 08:21</i>	<i>12/11/25 08:33</i>	<i>1</i>

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

**Lab Sample ID: MB 570-663011/1-A**  
**Matrix: Water**  
**Analysis Batch: 668356**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

<i>Analyte</i>	<i>Result</i>	<i>MB MB Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1-Methylnaphthalene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>2-Methylnaphthalene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Acenaphthene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Acenaphthylene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Anthracene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Benzo[a]anthracene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Benzo[a]pyrene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Benzo[b]fluoranthene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Benzo[g,h,i]perylene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Benzo[k]fluoranthene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Chrysene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Dibenz(a,h)anthracene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Fluoranthene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Fluorene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Indeno[1,2,3-cd]pyrene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Naphthalene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Phenanthrene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Pyrene</i>	<0.20		0.20	ug/L		<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	88		28 - 127			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	80		31 - 120			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	52		17 - 120			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	82		27 - 120			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	34		10 - 120			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	76		45 - 120			<i>12/01/25 08:21</i>	<i>12/11/25 08:13</i>	<i>1</i>

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: LCS 570-663011/2-A**  
**Matrix: Water**  
**Analysis Batch: 668356**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	13.4		ug/L		67	47 - 120
2-Methylnaphthalene	20.0	13.5		ug/L		68	43 - 120
Acenaphthene	20.0	16.4		ug/L		82	60 - 132
Acenaphthylene	20.0	15.7		ug/L		79	54 - 126
Anthracene	20.0	16.5		ug/L		82	43 - 120
Benzo[a]anthracene	20.0	16.7		ug/L		84	42 - 133
Benzo[a]pyrene	20.0	17.6		ug/L		88	32 - 148
Benzo[b]fluoranthene	20.0	17.8		ug/L		89	42 - 140
Benzo[g,h,i]perylene	20.0	16.6		ug/L		83	1 - 195
Benzo[k]fluoranthene	20.0	16.6		ug/L		83	25 - 146
Chrysene	20.0	16.5		ug/L		83	44 - 140
Dibenz(a,h)anthracene	20.0	17.9		ug/L		89	1 - 200
Fluoranthene	20.0	17.1		ug/L		86	43 - 121
Fluorene	20.0	16.6		ug/L		83	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.2		ug/L		86	1 - 151
Naphthalene	20.0	13.2		ug/L		66	36 - 120
Phenanthrene	20.0	16.9		ug/L		84	65 - 120
Pyrene	20.0	17.7		ug/L		89	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	85		28 - 127
2-Fluorobiphenyl (Surr)	84		31 - 120
2-Fluorophenol (Surr)	63		17 - 120
Nitrobenzene-d5 (Surr)	71		27 - 120
Phenol-d6 (Surr)	43		10 - 120
p-Terphenyl-d14 (Surr)	85		45 - 120

**Lab Sample ID: LCSD 570-663011/3-A**  
**Matrix: Water**  
**Analysis Batch: 668356**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	13.6		ug/L		68	47 - 120	1	20
2-Methylnaphthalene	20.0	13.6		ug/L		68	43 - 120	1	20
Acenaphthene	20.0	16.5		ug/L		82	60 - 132	0	29
Acenaphthylene	20.0	15.8		ug/L		79	54 - 126	0	45
Anthracene	20.0	16.2		ug/L		81	43 - 120	2	40
Benzo[a]anthracene	20.0	16.5		ug/L		82	42 - 133	2	32
Benzo[a]pyrene	20.0	17.2		ug/L		86	32 - 148	2	43
Benzo[b]fluoranthene	20.0	17.6		ug/L		88	42 - 140	1	43
Benzo[g,h,i]perylene	20.0	16.5		ug/L		83	1 - 195	1	61
Benzo[k]fluoranthene	20.0	16.4		ug/L		82	25 - 146	1	38
Chrysene	20.0	16.5		ug/L		82	44 - 140	1	53
Dibenz(a,h)anthracene	20.0	17.5		ug/L		87	1 - 200	2	75
Fluoranthene	20.0	16.7		ug/L		84	43 - 121	2	40
Fluorene	20.0	16.7		ug/L		84	70 - 120	1	23
Indeno[1,2,3-cd]pyrene	20.0	17.0		ug/L		85	1 - 151	1	60
Naphthalene	20.0	12.9		ug/L		65	36 - 120	2	39

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: LCSD 570-663011/3-A**  
**Matrix: Water**  
**Analysis Batch: 668356**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	16.5		ug/L		83	65 - 120	2	24
Pyrene	20.0	17.5		ug/L		88	70 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	81		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	65		17 - 120
Nitrobenzene-d5 (Surr)	70		27 - 120
Phenol-d6 (Surr)	43		10 - 120
p-Terphenyl-d14 (Surr)	82		45 - 120

**Lab Sample ID: 380-185035-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 668356**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 663011**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.2	13.7		ug/L		72	36 - 120
2-Methylnaphthalene	<0.19		19.2	13.8		ug/L		72	32 - 124
Acenaphthene	<0.19		19.2	16.4		ug/L		86	47 - 145
Acenaphthylene	<0.19		19.2	15.8		ug/L		83	33 - 145
Anthracene	<0.19		19.2	15.7		ug/L		82	27 - 133
Benzo[a]anthracene	<0.19		19.2	16.6		ug/L		87	33 - 143
Benzo[a]pyrene	<0.19		19.2	16.8		ug/L		88	17 - 163
Benzo[b]fluoranthene	<0.19		19.2	17.1		ug/L		89	24 - 159
Benzo[g,h,i]perylene	<0.19		19.2	16.3		ug/L		85	1 - 219
Benzo[k]fluoranthene	<0.19		19.2	16.6		ug/L		87	11 - 162
Chrysene	<0.19		19.2	16.4		ug/L		86	17 - 168
Dibenz(a,h)anthracene	<0.19		19.2	17.2		ug/L		90	1 - 227
Fluoranthene	<0.19		19.2	16.7		ug/L		87	26 - 137
Fluorene	<0.19		19.2	16.4		ug/L		86	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.2	16.9		ug/L		88	1 - 171
Naphthalene	<0.19		19.2	13.2		ug/L		69	21 - 133
Phenanthrene	<0.19		19.2	16.4		ug/L		86	54 - 120
Pyrene	<0.19		19.2	17.6		ug/L		92	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	61		17 - 120
Nitrobenzene-d5 (Surr)	71		27 - 120
Phenol-d6 (Surr)	40		10 - 120
p-Terphenyl-d14 (Surr)	84		45 - 120

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: 380-185035-A-1-B MSD**

**Matrix: Water**

**Analysis Batch: 668356**

**Client Sample ID: Matrix Spike Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 663011**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1-Methylnaphthalene	<0.19		19.3	12.8		ug/L		66	36 - 120	7	30
2-Methylnaphthalene	<0.19		19.3	13.0		ug/L		67	32 - 124	6	30
Acenaphthene	<0.19		19.3	15.9		ug/L		82	47 - 145	3	48
Acenaphthylene	<0.19		19.3	15.0		ug/L		78	33 - 145	5	74
Anthracene	<0.19		19.3	16.0		ug/L		83	27 - 133	2	66
Benzo[a]anthracene	<0.19		19.3	16.8		ug/L		87	33 - 143	1	53
Benzo[a]pyrene	<0.19		19.3	17.1		ug/L		89	17 - 163	2	72
Benzo[b]fluoranthene	<0.19		19.3	17.3		ug/L		90	24 - 159	1	71
Benzo[g,h,i]perylene	<0.19		19.3	16.5		ug/L		85	1 - 219	1	97
Benzo[k]fluoranthene	<0.19		19.3	16.5		ug/L		86	11 - 162	1	63
Chrysene	<0.19		19.3	16.6		ug/L		86	17 - 168	1	87
Dibenz(a,h)anthracene	<0.19		19.3	17.6		ug/L		91	1 - 227	2	126
Fluoranthene	<0.19		19.3	16.8		ug/L		87	26 - 137	1	66
Fluorene	<0.19		19.3	15.6		ug/L		81	59 - 121	5	38
Indeno[1,2,3-cd]pyrene	<0.19		19.3	17.0		ug/L		88	1 - 171	1	99
Naphthalene	<0.19		19.3	12.0		ug/L		62	21 - 133	9	65
Phenanthrene	<0.19		19.3	16.3		ug/L		84	54 - 120	1	39
Pyrene	<0.19		19.3	17.9		ug/L		93	52 - 120	2	49

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2,4,6-Tribromophenol (Surr)	81		28 - 127
2-Fluorobiphenyl (Surr)	79		31 - 120
2-Fluorophenol (Surr)	53		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	84		45 - 120

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

**Lab Sample ID: MB 570-666187/6**

**Matrix: Water**

**Analysis Batch: 666187**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			12/07/25 16:30	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		38 - 134		12/07/25 16:30	1

**Lab Sample ID: LCS 570-666187/4**

**Matrix: Water**

**Analysis Batch: 666187**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec
							Limits
Gasoline Range Organics (C4-C13)	400	345		ug/L		86	78 - 120

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: LCS 570-666187/4**  
**Matrix: Water**  
**Analysis Batch: 666187**

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		38 - 134

**Lab Sample ID: LCSD 570-666187/5**  
**Matrix: Water**  
**Analysis Batch: 666187**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	377		ug/L		94	78 - 120	9	10

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		38 - 134

**Lab Sample ID: MRL 570-666187/3**  
**Matrix: Water**  
**Analysis Batch: 666187**

**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	12.3		ug/L		123	50 - 150

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		38 - 134

**Lab Sample ID: 380-185035-C-1 MS**  
**Matrix: Water**  
**Analysis Batch: 666187**

**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	400		ug/L		100	68 - 122

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		38 - 134

**Lab Sample ID: 380-185035-C-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 666187**

**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	396		ug/L		99	68 - 122	1	18

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		38 - 134

# QC Sample Results

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: MB 570-663324/1-A**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		12/01/25 16:05	12/06/25 23:26	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		12/01/25 16:05	12/06/25 23:26	1
C8-C18	<25		25	ug/L		12/01/25 16:05	12/06/25 23:26	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
<i>n-Octacosane (Surr)</i>	99		60 - 130			12/01/25 16:05	12/06/25 23:26	1

**Lab Sample ID: LCS 570-663324/2-A**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	1600	1660		ug/L		104	56 - 127
Surrogate	LCS LCS		Limits				
	%Recovery	Qualifier					
<i>n-Octacosane (Surr)</i>	109		60 - 130				

**Lab Sample ID: LCSD 570-663324/3-A**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
C10-C28	1600	1610		ug/L		101	56 - 127	3	23
Surrogate	LCSD LCSD		Limits						
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	106		60 - 130						

**Lab Sample ID: MRL 570-663324/4-A**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	Spike Added	MRL MRL		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	0.0200	0.0303	^3+	mg/L		152	50 - 150
Surrogate	MRL MRL		Limits				
	%Recovery	Qualifier					
<i>n-Octacosane (Surr)</i>	117		60 - 130				

**Lab Sample ID: 380-185076-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
C10-C28	49	^3+	1620	1610		ug/L		96	70 - 130
Surrogate	MS MS		Limits						
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	98		60 - 130						

# QC Sample Results

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

Job ID: 380-185033-1  
 SDG: Weekly: Ka'amilo Wells Pump 1

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

**Lab Sample ID: 380-185076-B-1-A MSD**  
**Matrix: Water**  
**Analysis Batch: 666060**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 663324**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	49	^3+	1640	1900		ug/L		113	70 - 130	17	20
<b>Surrogate</b>									<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>
<i>n-Octacosane (Surr)</i>									115		60 - 130

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# QC Association Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## GC/MS Semi VOA

### Prep Batch: 189440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	
MB 380-189440/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-189440/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-189440/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-185034-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-185034-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 189744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	189440
MB 380-189440/20-A	Method Blank	Total/NA	Water	525.2	189440
LCS 380-189440/22-A	Lab Control Sample	Total/NA	Water	525.2	189440
MRL 380-189440/21-A	Lab Control Sample	Total/NA	Water	525.2	189440
380-185034-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	189440
380-185034-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	189440

### Prep Batch: 663011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	
MB 570-663011/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-663011/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-663011/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-185035-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-185035-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

### Analysis Batch: 668191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	663011
MB 570-663011/1-A	Method Blank	Total/NA	Water	625.1	663011

### Analysis Batch: 668356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1 SIM	663011
MB 570-663011/1-A	Method Blank	Total/NA	Water	625.1 SIM	663011
LCS 570-663011/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	663011
LCSD 570-663011/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	663011
380-185035-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	663011
380-185035-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	663011

## GC VOA

### Analysis Batch: 666187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	
380-185033-2	TB: Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	
MB 570-666187/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-666187/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-666187/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-666187/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-185035-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-185035-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

# QC Association Summary

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

Job ID: 380-185033-1  
 SDG: Weekly: Ka'amilo Wells Pump 1

## GC Semi VOA

### Prep Batch: 663324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	3510C	
MB 570-663324/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-663324/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-663324/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-663324/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-185076-A-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-185076-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 666060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-185033-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B	663324
MB 570-663324/1-A	Method Blank	Total/NA	Water	8015B	663324
LCS 570-663324/2-A	Lab Control Sample	Total/NA	Water	8015B	663324
LCSD 570-663324/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	663324
MRL 570-663324/4-A	Lab Control Sample	Total/NA	Water	8015B	663324
380-185076-A-1-A MS	Matrix Spike	Total/NA	Water	8015B	663324
380-185076-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	663324



# Lab Chronicle

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

Job ID: 380-185033-1  
 SDG: Weekly: Ka'amilo Wells Pump 1

## Client Sample ID: Ka'amilo Wells Pump 1

## Lab Sample ID: 380-185033-1

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			189440	KRD3	EA POM	12/02/25 08:58
Total/NA	Analysis	525.2		1	189744	Q8LA	EA POM	12/03/25 16:04
Total/NA	Prep	625.1			663011	OAJ3	EET CAL 4	12/01/25 08:21
Total/NA	Analysis	625.1		1	668191	J7WE	EET CAL 4	12/11/25 12:35
Total/NA	Prep	625.1			663011	OAJ3	EET CAL 4	12/01/25 08:21
Total/NA	Analysis	625.1 SIM		1	668356	PQS1	EET CAL 4	12/11/25 13:19
Total/NA	Analysis	8015B GRO LL		1	666187	YD9V	EET CAL 4	12/07/25 21:00
Total/NA	Prep	3510C			663324	TVD6	EET CAL 4	12/01/25 16:05
Total/NA	Analysis	8015B		1	666060	H6FE	EET CAL 4	12/07/25 05:30

## Client Sample ID: TB: Ka'amilo Wells Pump 1

## Lab Sample ID: 380-185033-2

Date Collected: 11/24/25 10:40

Matrix: Water

Date Received: 11/28/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	666187	YD9V	EET CAL 4	12/08/25 00:40

**Laboratory References:**

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

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

# Accreditation/Certification Summary

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

Job ID: 380-185033-1  
 SDG: Weekly: Ka'amilo Wells Pump 1

## Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

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

## Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-17-26
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	State	3082	07-31-26

Eurofins Eaton Analytical Pomona

# Accreditation/Certification Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

## Laboratory: Eurofins Calscience (Continued)

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

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

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# Method Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

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

#### Protocol References:

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

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

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

# Sample Summary

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

Job ID: 380-185033-1  
SDG: Weekly: Ka'amilo Wells Pump 1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-185033-1	Ka'amilo Wells Pump 1	Water	11/24/25 10:40	11/28/25 10:12	Hawaii
380-185033-2	TB: Ka'amilo Wells Pump 1	Water	11/24/25 10:40	11/28/25 10:12	Hawaii

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## Login Sample Receipt Checklist

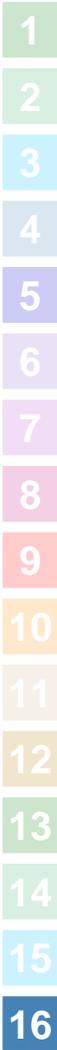
Client: City & County of Honolulu

Job Number: 380-185033-1  
SDG Number: Weekly: Ka'amilo Wells Pump 1

**Login Number: 185033**  
**List Number: 1**  
**Creator: Ngo, Theodore**

**List Source: Eurofins Eaton Analytical Pomona**

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



## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-185033-1  
SDG Number: Weekly: Ka'amilo Wells Pump 1

**Login Number: 185033**  
**List Number: 2**  
**Creator: Yu, Tiffany**

**List Source: Eurofins Calscience**  
**List Creation: 11/29/25 11:20 AM**

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	1.0,1.4
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

