

# ANALYTICAL REPORT

## PREPARED FOR

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City & County of Honolulu  
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Honolulu, Hawaii 96843

Generated 2/12/2025 10:55:58 AM

## JOB DESCRIPTION

RED-HILL  
Weekly

## JOB NUMBER

380-132659-1

# Eurofins Eaton Analytical Pomona

## Job Notes

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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: 380-132659-1  
SDG: Weekly

## Qualifiers

### GC/MS Semi VOA

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

### GC/MS Semi VOA TICs

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

## 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: 380-132659-1

**Job ID: 380-132659-1**

**Eurofins Eaton Analytical Pomona**

## **Job Narrative 380-132659-1**

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

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

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

### **Receipt**

The samples were received on 1/29/2025 10:20 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 2.0°C and 2.5°C.

### **GC/MS Semi VOA**

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

### **Gasoline Range Organics**

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

### **Diesel Range Organics**

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: 380-132659-1  
SDG: Weekly

## Client Sample ID: Ka'amilo Wells

## Lab Sample ID: 380-132659-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.035		0.0097	ug/L	1		525.2	Total/NA

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

## Lab Sample ID: 380-132659-2

No Detections.

- 1
- 2
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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: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132659-1**

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2,4'-DDD	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2,4'-DDE	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2,4'-DDT	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
2-Methylnaphthalene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
4,4'-DDD	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
4,4'-DDE	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
4,4'-DDT	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Acenaphthene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Acenaphthylene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Acetochlor	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Alachlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
alpha-BHC	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
alpha-Chlordane	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Anthracene	<0.019		0.019	ug/L		01/31/25 07:59	02/01/25 11:31	1
Atrazine	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Benz(a)anthracene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Benzo[a]pyrene	<0.019		0.019	ug/L		01/31/25 07:59	02/01/25 11:31	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		01/31/25 07:59	02/01/25 11:31	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		01/31/25 07:59	02/01/25 11:31	1
beta-BHC	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		01/31/25 07:59	02/01/25 11:31	1
Bromacil	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Butachlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Butylbenzylphthalate	<0.48		0.48	ug/L		01/31/25 07:59	02/01/25 11:31	1
Chlorobenzilate	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Chloroneb	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Chlorpyrifos	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Chrysene	<0.019		0.019	ug/L		01/31/25 07:59	02/01/25 11:31	1
delta-BHC	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		01/31/25 07:59	02/01/25 11:31	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
<b>Dieldrin</b>	<b>0.035</b>		0.0097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Diethylphthalate	<0.48		0.48	ug/L		01/31/25 07:59	02/01/25 11:31	1
Dimethylphthalate	<0.48		0.48	ug/L		01/31/25 07:59	02/01/25 11:31	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		01/31/25 07:59	02/01/25 11:31	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Endosulfan sulfate	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Endrin	<0.0097		0.0097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Endrin aldehyde	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
EPTC	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Fluoranthene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1

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# Client Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132659-1**

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

**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		01/31/25 07:59	02/01/25 11:31	1
gamma-Chlordane	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Heptachlor	<0.0097		0.0097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Hexachlorobenzene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Isophorone	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Lindane	<0.0097		0.0097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Malathion	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Methoxychlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Metolachlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Molinate	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Naphthalene	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Parathion	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Phenanthrene	<0.039		0.039	ug/L		01/31/25 07:59	02/01/25 11:31	1
Propachlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Pyrene	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Simazine	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Terbacil	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Terbutylazine	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Thiobencarb	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		01/31/25 07:59	02/01/25 11:31	1
trans-Nonachlor	<0.048		0.048	ug/L		01/31/25 07:59	02/01/25 11:31	1
Trifluralin	<0.097		0.097	ug/L		01/31/25 07:59	02/01/25 11:31	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	01/31/25 07:59	02/01/25 11:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	100		70 - 130	01/31/25 07:59	02/01/25 11:31	1
Perylene-d12	98		70 - 130	01/31/25 07:59	02/01/25 11:31	1
Triphenylphosphate	99		70 - 130	01/31/25 07:59	02/01/25 11:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
2-Methylnaphthalene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Acenaphthene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Acenaphthylene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Anthracene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Benzo[a]anthracene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Benzo[a]pyrene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Chrysene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Fluoranthene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1

Eurofins Eaton Analytical Pomona



# Client Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132659-1**

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

**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		01/30/25 19:44	02/10/25 15:46	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Naphthalene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Phenanthrene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1
Pyrene	<0.19		0.19	ug/L		01/30/25 19:44	02/10/25 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	52		28 - 127	01/30/25 19:44	02/10/25 15:46	1
2-Fluorobiphenyl (Surr)	52		31 - 120	01/30/25 19:44	02/10/25 15:46	1
2-Fluorophenol (Surr)	23		17 - 120	01/30/25 19:44	02/10/25 15:46	1
Nitrobenzene-d5 (Surr)	49		27 - 120	01/30/25 19:44	02/10/25 15:46	1
Phenol-d6 (Surr)	14		10 - 120	01/30/25 19:44	02/10/25 15:46	1
p-Terphenyl-d14 (Surr)	73		45 - 120	01/30/25 19:44	02/10/25 15:46	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	01/30/25 19:44	02/11/25 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	68		33 - 139	01/30/25 19:44	02/11/25 12:34	1
2-Fluorobiphenyl (Surr)	49		33 - 126	01/30/25 19:44	02/11/25 12:34	1
2-Fluorophenol (Surr)	26		12 - 120	01/30/25 19:44	02/11/25 12:34	1
Nitrobenzene-d5 (Surr)	52		36 - 120	01/30/25 19:44	02/11/25 12:34	1
Phenol-d6 (Surr)	15		10 - 120	01/30/25 19:44	02/11/25 12:34	1
p-Terphenyl-d14 (Surr)	71		47 - 131	01/30/25 19:44	02/11/25 12:34	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			01/31/25 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		38 - 134		01/31/25 15:11	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		01/31/25 18:43	02/02/25 18:03	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		01/31/25 18:43	02/02/25 18:03	1
C8-C18	<26		26	ug/L		01/31/25 18:43	02/02/25 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	112		60 - 130	01/31/25 18:43	02/02/25 18:03	1

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

**Lab Sample ID: 380-132659-2**

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			01/31/25 18:11	1

# Client Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132659-2**

**Date Collected: 01/27/25 11:57**

**Matrix: Water**

**Date Received: 01/29/25 10:20**

<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)	87		38 - 134		01/31/25 18:11	1

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- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
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# Action Limit Summary

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132659-1**

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

# Surrogate Summary

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

Job ID: 380-132659-1  
SDG: Weekly

## 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)
380-132646-B-3-A DU	Duplicate	99	99	102
380-132659-1	Ka'amilo Wells	100	98	99
380-132662-B-3-A MS	Matrix Spike	99	98	102
LCS 380-131760/23-A	Lab Control Sample	100	96	102
MB 380-131760/21-A	Method Blank	99	96	104
MRL 380-131760/22-A	Lab Control Sample	99	94	102

**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)
380-132659-1	Ka'amilo Wells	68	49	26	52	15	71
MB 570-528373/1-A	Method Blank	115	82	43	78	26	99

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

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

Matrix: 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)
380-132646-A-1-A MS	Matrix Spike	70	66	36	57	22	82
380-132646-A-1-B MSD	Matrix Spike Duplicate	75	73	39	63	25	82
380-132659-1	Ka'amilo Wells	52	52	23	49	14	73
LCS 570-528373/2-A	Lab Control Sample	79	78	42	66	26	81
LCSD 570-528373/3-A	Lab Control Sample Dup	74	75	43	63	27	85
MB 570-528373/1-A	Method Blank	85	82	35	78	22	82

**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: 380-132659-1  
 SDG: Weekly

## 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)
380-132646-C-1 MS	Matrix Spike	94
380-132646-C-1 MSD	Matrix Spike Duplicate	95
380-132659-1	Ka'amilo Wells	93
380-132659-2	TB: Ka'amilo Wells	87
LCS 570-528518/4	Lab Control Sample	96
LCSD 570-528518/5	Lab Control Sample Dup	96
MB 570-528518/6	Method Blank	92
MRL 570-528518/3	Lab Control Sample	90

**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)
380-132646-B-1-A MS	Matrix Spike	95
380-132646-B-1-B MSD	Matrix Spike Duplicate	94
380-132659-1	Ka'amilo Wells	112
LCS 570-528773/2-A	Lab Control Sample	91
LCSD 570-528773/3-A	Lab Control Sample Dup	93
MB 570-528773/1-A	Method Blank	91
MRL 570-528773/4-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: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: MB 380-131760/21-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2,4'-DDD	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2,4'-DDE	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2,4'-DDT	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
2-Methylnaphthalene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
4,4'-DDD	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
4,4'-DDE	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
4,4'-DDT	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Acenaphthene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Acenaphthylene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Acetochlor	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Alachlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
alpha-BHC	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
alpha-Chlordane	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Anthracene	<0.020		0.020	ug/L		01/31/25 07:59	02/01/25 10:09	1
Atrazine	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Benz(a)anthracene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Benzo[a]pyrene	<0.020		0.020	ug/L		01/31/25 07:59	02/01/25 10:09	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		01/31/25 07:59	02/01/25 10:09	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		01/31/25 07:59	02/01/25 10:09	1
beta-BHC	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		01/31/25 07:59	02/01/25 10:09	1
Bromacil	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Butachlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Butylbenzylphthalate	<0.50		0.50	ug/L		01/31/25 07:59	02/01/25 10:09	1
Chlorobenzilate	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Chloroneb	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Chlorpyrifos	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Chrysene	<0.020		0.020	ug/L		01/31/25 07:59	02/01/25 10:09	1
delta-BHC	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		01/31/25 07:59	02/01/25 10:09	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Dieldrin	<0.0099		0.0099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Diethylphthalate	<0.50		0.50	ug/L		01/31/25 07:59	02/01/25 10:09	1
Dimethylphthalate	<0.50		0.50	ug/L		01/31/25 07:59	02/01/25 10:09	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		01/31/25 07:59	02/01/25 10:09	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Endosulfan sulfate	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Endrin	<0.0099		0.0099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Endrin aldehyde	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
EPTC	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1

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# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: MB 380-131760/21-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Fluorene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
gamma-Chlordane	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Heptachlor	<0.0099		0.0099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Hexachlorobenzene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Isophorone	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Lindane	<0.0099		0.0099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Malathion	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Methoxychlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Metolachlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Molinate	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Naphthalene	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Parathion	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Phenanthrene	<0.040		0.040	ug/L		01/31/25 07:59	02/01/25 10:09	1
Propachlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Pyrene	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Simazine	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Terbacil	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Terbutylazine	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Thiobencarb	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		01/31/25 07:59	02/01/25 10:09	1
trans-Nonachlor	<0.050		0.050	ug/L		01/31/25 07:59	02/01/25 10:09	1
Trifluralin	<0.099		0.099	ug/L		01/31/25 07:59	02/01/25 10:09	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.518	T J	ug/L		3.29	N/A	01/31/25 07:59	02/01/25 10:09	1
9-Octadecenamide, (Z)-	1.56	T J N	ug/L		7.95	301-02-0	01/31/25 07:59	02/01/25 10:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	01/31/25 07:59	02/01/25 10:09	1
Perylene-d12	96		70 - 130	01/31/25 07:59	02/01/25 10:09	1
Triphenylphosphate	104		70 - 130	01/31/25 07:59	02/01/25 10:09	1

**Lab Sample ID: LCS 380-131760/23-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.99	1.82		ug/L		92	70 - 130
2,4'-DDD	1.99	1.99		ug/L		100	70 - 130
2,4'-DDE	1.99	1.97		ug/L		99	70 - 130
2,4'-DDT	1.99	2.02		ug/L		101	70 - 130
2,4-Dinitrotoluene	1.99	1.91		ug/L		96	70 - 130
2,6-Dinitrotoluene	1.99	2.00		ug/L		101	70 - 130

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# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: LCS 380-131760/23-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	1.99	1.84		ug/L		93	70 - 130
4,4'-DDD	1.99	2.01		ug/L		101	70 - 130
4,4'-DDE	1.99	1.94		ug/L		97	70 - 130
4,4'-DDT	1.99	1.89		ug/L		95	70 - 130
Acenaphthene	1.99	1.97		ug/L		99	70 - 130
Acenaphthylene	1.99	1.94		ug/L		97	70 - 130
Acetochlor	1.99	2.01		ug/L		101	70 - 130
Alachlor	1.99	2.02		ug/L		101	70 - 130
alpha-BHC	1.99	1.97		ug/L		99	70 - 130
alpha-Chlordane	1.99	1.99		ug/L		100	70 - 130
Anthracene	1.99	1.77		ug/L		89	70 - 130
Atrazine	1.99	2.07		ug/L		104	70 - 130
Benz(a)anthracene	1.99	1.92		ug/L		96	70 - 130
Benzo[a]pyrene	1.99	1.91		ug/L		96	70 - 130
Benzo[b]fluoranthene	1.99	2.07		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.99	1.96		ug/L		98	70 - 130
Benzo[k]fluoranthene	1.99	1.99		ug/L		100	70 - 130
beta-BHC	1.99	2.04		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	1.92		ug/L		97	70 - 130
Bromacil	1.99	1.97		ug/L		99	70 - 130
Butachlor	1.99	2.19		ug/L		110	70 - 130
Butylbenzylphthalate	1.99	2.06		ug/L		103	70 - 130
Chlorobenzilate	1.99	1.72		ug/L		87	70 - 130
Chloroneb	1.99	1.96		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.17		ug/L		109	70 - 130
Chlorpyrifos	1.99	2.05		ug/L		103	70 - 130
Chrysene	1.99	1.94		ug/L		97	70 - 130
delta-BHC	1.99	1.98		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	1.99	1.90		ug/L		95	70 - 130
Dibenz(a,h)anthracene	1.99	1.89		ug/L		95	70 - 130
Diclorvos (DDVP)	1.99	2.02		ug/L		101	70 - 130
Dieldrin	1.99	1.92		ug/L		97	70 - 130
Diethylphthalate	1.99	2.07		ug/L		104	70 - 130
Dimethylphthalate	1.99	2.02		ug/L		101	70 - 130
Di-n-butyl phthalate	3.98	4.10		ug/L		103	70 - 130
Di-n-octyl phthalate	1.99	1.72		ug/L		86	70 - 130
Endosulfan I (Alpha)	1.99	1.99		ug/L		100	70 - 130
Endosulfan II (Beta)	1.99	2.00		ug/L		101	70 - 130
Endosulfan sulfate	1.99	1.99		ug/L		100	70 - 130
Endrin	1.99	1.97		ug/L		99	70 - 130
Endrin aldehyde	1.99	1.96		ug/L		98	60 - 130
EPTC	1.99	2.01		ug/L		101	70 - 130
Fluoranthene	1.99	2.04		ug/L		102	70 - 130
Fluorene	1.99	1.97		ug/L		99	70 - 130
gamma-Chlordane	1.99	1.98		ug/L		100	70 - 130
Heptachlor	1.99	2.04		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	1.99	1.96		ug/L		98	70 - 130
Hexachlorobenzene	1.99	1.84		ug/L		92	70 - 130
Hexachlorocyclopentadiene	1.99	1.81		ug/L		91	70 - 130

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# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: LCS 380-131760/23-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	1.99	1.88		ug/L		95	70 - 130
Isophorone	1.99	1.86		ug/L		93	70 - 130
Lindane	1.99	1.99		ug/L		100	70 - 130
Malathion	1.99	1.98		ug/L		100	70 - 130
Methoxychlor	1.99	1.96		ug/L		99	70 - 130
Metolachlor	1.99	2.12		ug/L		106	70 - 130
Molinate	1.99	2.06		ug/L		104	70 - 130
Naphthalene	1.99	1.96		ug/L		99	70 - 130
Parathion	1.99	2.02		ug/L		102	70 - 130
Pendimethalin (Penoxaline)	1.99	1.93		ug/L		97	70 - 130
Phenanthrene	1.99	2.00		ug/L		100	70 - 130
Propachlor	1.99	2.09		ug/L		105	70 - 130
Pyrene	1.99	2.04		ug/L		103	70 - 130
Simazine	1.99	2.08		ug/L		104	70 - 130
Terbacil	1.99	2.12		ug/L		107	70 - 130
Terbutylazine	1.99	2.08		ug/L		105	70 - 130
Thiobencarb	1.99	2.14		ug/L		107	70 - 130
trans-Nonachlor	1.99	1.98		ug/L		99	70 - 130
Trifluralin	1.99	1.82		ug/L		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	102		70 - 130

**Lab Sample ID: MRL 380-131760/22-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0992	0.0993		ug/L		100	50 - 150
2,4'-DDD	0.0992	0.0894	J	ug/L		90	50 - 150
2,4'-DDE	0.0992	0.0952	J	ug/L		96	50 - 150
2,4'-DDT	0.0992	0.0962	J	ug/L		97	50 - 150
2,4-Dinitrotoluene	0.0992	0.0980	J	ug/L		99	50 - 150
2,6-Dinitrotoluene	0.0992	0.0885	J	ug/L		89	50 - 150
2-Methylnaphthalene	0.0992	0.0958	J	ug/L		97	50 - 150
4,4'-DDD	0.0992	0.102		ug/L		103	50 - 150
4,4'-DDE	0.0992	0.101		ug/L		101	50 - 150
4,4'-DDT	0.0992	0.108		ug/L		109	50 - 150
Acenaphthene	0.0992	0.0838	J	ug/L		84	50 - 150
Acenaphthylene	0.0992	0.0925	J	ug/L		93	50 - 150
Acetochlor	0.0992	0.111		ug/L		112	50 - 150
Alachlor	0.0496	0.0467	J	ug/L		94	50 - 150
alpha-BHC	0.0992	0.106		ug/L		107	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		105	50 - 150
Anthracene	0.0198	0.0214		ug/L		108	50 - 150
Atrazine	0.0496	0.0495	J	ug/L		100	50 - 150

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: MRL 380-131760/22-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benz(a)anthracene	0.0496	0.0530		ug/L		107	50 - 150
Benzo[a]pyrene	0.0198	0.0180	J	ug/L		91	50 - 150
Benzo[b]fluoranthene	0.0198	0.0169	J	ug/L		85	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0388	J	ug/L		78	50 - 150
Benzo[k]fluoranthene	0.0198	<0.017		ug/L		78	50 - 150
beta-BHC	0.0992	0.112		ug/L		113	50 - 150
Bis(2-ethylhexyl) phthalate	0.595	0.571	J	ug/L		96	50 - 150
Bromacil	0.0992	0.102		ug/L		103	50 - 150
Butachlor	0.0496	0.0471	J	ug/L		95	50 - 150
Butylbenzylphthalate	0.496	0.542		ug/L		109	50 - 150
Chlorobenzilate	0.0992	0.0742	J	ug/L		75	50 - 150
Chloroneb	0.0992	0.114		ug/L		115	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0992	0.0836	J	ug/L		84	50 - 150
Chlorpyrifos	0.0496	0.0489	J	ug/L		99	50 - 150
Chrysene	0.0198	0.0209		ug/L		105	50 - 150
delta-BHC	0.0992	0.108		ug/L		109	50 - 150
Di(2-ethylhexyl)adipate	0.595	0.630		ug/L		106	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0417	J	ug/L		84	50 - 150
Diclorvos (DDVP)	0.0496	0.0563		ug/L		113	50 - 150
Dieldrin	0.00992	0.0128		ug/L		129	50 - 150
Diethylphthalate	0.496	0.522		ug/L		105	50 - 150
Dimethylphthalate	0.496	0.507		ug/L		102	50 - 150
Di-n-butyl phthalate	0.496	0.518	J	ug/L		104	49 - 243
Di-n-octyl phthalate	0.0992	0.0888	J	ug/L		90	50 - 150
Endosulfan I (Alpha)	0.0992	0.0943	J	ug/L		95	50 - 150
Endosulfan II (Beta)	0.0992	0.103		ug/L		104	50 - 150
Endosulfan sulfate	0.0992	0.0984	J	ug/L		99	50 - 150
Endrin	0.00992	0.0106		ug/L		107	50 - 150
Endrin aldehyde	0.0992	0.0925	J	ug/L		93	50 - 150
EPTC	0.0992	0.0907	J	ug/L		91	50 - 150
Fluoranthene	0.0992	0.0970	J	ug/L		98	50 - 150
Fluorene	0.0496	<0.050		ug/L		98	50 - 150
gamma-Chlordane	0.0248	0.0231	J	ug/L		93	50 - 150
Heptachlor	0.00992	0.0114		ug/L		115	50 - 150
Heptachlor epoxide (isomer B)	0.00992	0.0116		ug/L		117	50 - 150
Hexachlorobenzene	0.0496	0.0445	J	ug/L		90	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0422	J	ug/L		85	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0437	J	ug/L		88	50 - 150
Isophorone	0.0992	0.115		ug/L		116	50 - 150
Lindane	0.00992	0.0104		ug/L		105	50 - 150
Malathion	0.0992	0.0987	J	ug/L		99	50 - 150
Methoxychlor	0.0496	0.0590		ug/L		119	50 - 150
Metolachlor	0.0496	0.0548		ug/L		110	50 - 150
Molinate	0.0992	0.0996		ug/L		100	50 - 150
Naphthalene	0.0992	0.0885	J	ug/L		89	50 - 150
Parathion	0.0992	0.0846	J	ug/L		85	50 - 150
Pendimethalin (Penoxaline)	0.0992	0.0900	J	ug/L		91	50 - 150
Phenanthrene	0.0397	0.0345	J	ug/L		87	50 - 150
Propachlor	0.0496	0.0489	J	ug/L		99	50 - 150

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: MRL 380-131760/22-A**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Pyrene	0.0496	0.0466	J	ug/L		94	50 - 150
Simazine	0.0496	0.0488	J	ug/L		98	50 - 150
Terbacil	0.0992	0.103		ug/L		104	50 - 150
Terbutylazine	0.0992	0.100		ug/L		101	50 - 150
Thiobencarb	0.0992	0.0981	J	ug/L		99	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		93	50 - 150
Trifluralin	0.0992	0.0919	J	ug/L		93	50 - 150

  

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	102		70 - 130

**Lab Sample ID: 380-132662-B-3-A MS**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.95	1.84		ug/L		94	70 - 130
2,4'-DDD	<0.098		1.95	2.03		ug/L		104	70 - 130
2,4'-DDE	<0.098		1.95	2.02		ug/L		103	70 - 130
2,4'-DDT	<0.098		1.95	2.05		ug/L		105	70 - 130
2,4-Dinitrotoluene	<0.098		1.95	2.06		ug/L		106	70 - 130
2,6-Dinitrotoluene	<0.098		1.95	2.12		ug/L		108	70 - 130
2-Methylnaphthalene	<0.098		1.95	1.86		ug/L		95	70 - 130
4,4'-DDD	<0.098		1.95	2.07		ug/L		106	70 - 130
4,4'-DDE	<0.098		1.95	2.01		ug/L		103	70 - 130
4,4'-DDT	<0.098		1.95	1.96		ug/L		100	70 - 130
Acenaphthene	<0.098		1.95	2.00		ug/L		103	70 - 130
Acenaphthylene	<0.098		1.95	1.97		ug/L		101	70 - 130
Acetochlor	<0.098		1.95	2.00		ug/L		102	70 - 130
Alachlor	<0.049		1.95	2.06		ug/L		106	70 - 130
alpha-BHC	<0.098		1.95	2.01		ug/L		103	70 - 130
alpha-Chlordane	<0.049		1.95	2.03		ug/L		104	70 - 130
Anthracene	<0.020	F1	1.95	1.33	F1	ug/L		68	70 - 130
Atrazine	<0.049		1.95	2.15		ug/L		110	70 - 130
Benz(a)anthracene	<0.049		1.95	1.91		ug/L		98	70 - 130
Benzo[a]pyrene	<0.020		1.95	1.85		ug/L		95	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	2.11		ug/L		108	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	2.04		ug/L		105	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.06		ug/L		106	70 - 130
beta-BHC	<0.098		1.95	2.09		ug/L		107	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.95	2.00		ug/L		102	70 - 130
Bromacil	<0.098		1.95	2.04		ug/L		105	70 - 130
Butachlor	<0.049		1.95	2.21		ug/L		113	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.08		ug/L		106	70 - 130
Chlorobenzilate	<0.098		1.95	1.84		ug/L		94	70 - 130
Chloroneb	<0.098		1.95	2.03		ug/L		104	70 - 130

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132662-B-3-A MS**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.16		ug/L		110	70 - 130
Chlorpyrifos	<0.049		1.95	2.08		ug/L		107	70 - 130
Chrysene	<0.020		1.95	1.97		ug/L		101	70 - 130
delta-BHC	<0.098		1.95	1.99		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.95	2.02		ug/L		104	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	1.97		ug/L		101	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.02		ug/L		103	70 - 130
Dieldrin	<0.0098		1.95	1.98		ug/L		101	70 - 130
Diethylphthalate	<0.49		1.95	2.10		ug/L		108	70 - 130
Dimethylphthalate	<0.49		1.95	2.04		ug/L		104	70 - 130
Di-n-butyl phthalate	<0.98		3.91	4.15		ug/L		106	70 - 130
Di-n-octyl phthalate	<0.098		1.95	1.78		ug/L		91	70 - 130
Endosulfan I (Alpha)	<0.098		1.95	1.96		ug/L		100	70 - 130
Endosulfan II (Beta)	<0.098		1.95	2.04		ug/L		105	70 - 130
Endosulfan sulfate	<0.098		1.95	2.03		ug/L		104	70 - 130
Endrin	<0.0098		1.95	2.04		ug/L		105	70 - 130
Endrin aldehyde	<0.098		1.95	1.75		ug/L		90	60 - 130
EPTC	<0.098		1.95	2.04		ug/L		104	70 - 130
Fluoranthene	<0.098		1.95	2.09		ug/L		107	70 - 130
Fluorene	<0.049		1.95	2.00		ug/L		102	70 - 130
gamma-Chlordane	<0.049		1.95	2.03		ug/L		104	70 - 130
Heptachlor	<0.0098		1.95	2.10		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		1.95	2.02		ug/L		103	70 - 130
Hexachlorobenzene	<0.049		1.95	1.92		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.049		1.95	1.87		ug/L		96	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.95	1.97		ug/L		101	70 - 130
Isophorone	<0.098		1.95	1.96		ug/L		100	70 - 130
Lindane	<0.0098		1.95	2.04		ug/L		104	70 - 130
Malathion	<0.098		1.95	2.02		ug/L		103	70 - 130
Methoxychlor	<0.049		1.95	2.01		ug/L		103	70 - 130
Metolachlor	<0.049		1.95	2.14		ug/L		109	70 - 130
Molinate	<0.098		1.95	2.08		ug/L		107	70 - 130
Naphthalene	<0.098		1.95	1.98		ug/L		101	70 - 130
Parathion	<0.098		1.95	2.09		ug/L		107	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.95	2.05		ug/L		105	70 - 130
Phenanthrene	<0.039		1.95	2.02		ug/L		103	70 - 130
Propachlor	<0.049		1.95	2.15		ug/L		110	70 - 130
Pyrene	<0.049		1.95	2.09		ug/L		107	70 - 130
Simazine	<0.049		1.95	2.16		ug/L		110	70 - 130
Terbacil	<0.098		1.95	2.23		ug/L		114	70 - 130
Terbutylazine	<0.098		1.95	2.15		ug/L		110	70 - 130
Thiobencarb	<0.098		1.95	2.16		ug/L		111	70 - 130
trans-Nonachlor	<0.049		1.95	2.02		ug/L		103	70 - 130
Trifluralin	<0.098		1.95	1.93		ug/L		99	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	98		70 - 130

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132662-B-3-A MS**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Triphenylphosphate	102		70 - 130

**Lab Sample ID: 380-132646-B-3-A DU**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Sample	Sample	DU DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
2,4'-DDD	<0.097		<0.097		ug/L		NC	20
2,4'-DDE	<0.097		<0.097		ug/L		NC	20
2,4'-DDT	<0.097		<0.097		ug/L		NC	20
2,4-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
4,4'-DDD	<0.097		<0.097		ug/L		NC	20
4,4'-DDE	<0.097		<0.097		ug/L		NC	20
4,4'-DDT	<0.097		<0.097		ug/L		NC	20
Acenaphthene	<0.097		<0.097		ug/L		NC	20
Acenaphthylene	<0.097		<0.097		ug/L		NC	20
Acetochlor	<0.097		<0.097		ug/L		NC	20
Alachlor	<0.049		<0.048		ug/L		NC	20
alpha-BHC	<0.097		<0.097		ug/L		NC	20
alpha-Chlordane	<0.049		<0.048		ug/L		NC	20
Anthracene	<0.019		<0.019		ug/L		NC	20
Atrazine	<0.049		<0.048		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.048		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.048		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.097		<0.097		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.58		ug/L		NC	20
Bromacil	<0.097		<0.097		ug/L		NC	20
Butachlor	<0.049		<0.048		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.48		ug/L		NC	20
Chlorobenzilate	<0.097		<0.097		ug/L		NC	20
Chloroneb	<0.097		<0.097		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.097		ug/L		NC	20
Chlorpyrifos	<0.049		<0.048		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.097		<0.097		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.048		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.048		ug/L		NC	20
Dieldrin	0.011		0.0113		ug/L		6	20
Diethylphthalate	<0.49		<0.48		ug/L		NC	20
Dimethylphthalate	<0.49		<0.48		ug/L		NC	20
Di-n-butyl phthalate	<0.97		<0.97		ug/L		NC	20

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132646-B-3-A DU**  
**Matrix: Water**  
**Analysis Batch: 131948**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 131760**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Di-n-octyl phthalate	<0.097		<0.097		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.097		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.097		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.097		ug/L		NC	20
Endrin	<0.0097		<0.0097		ug/L		NC	20
Endrin aldehyde	<0.097		<0.097		ug/L		NC	20
EPTC	<0.097		<0.097		ug/L		NC	20
Fluoranthene	<0.097		<0.097		ug/L		NC	20
Fluorene	<0.049		<0.048		ug/L		NC	20
gamma-Chlordane	<0.049		<0.048		ug/L		NC	20
Heptachlor	<0.0097		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0097		ug/L		NC	20
Hexachlorobenzene	<0.049		<0.048		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.048		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.048		ug/L		NC	20
Isophorone	<0.097		<0.097		ug/L		NC	20
Lindane	<0.0097		<0.0097		ug/L		NC	20
Malathion	<0.097		<0.097		ug/L		NC	20
Methoxychlor	<0.049		<0.048		ug/L		NC	20
Metolachlor	<0.049		<0.048		ug/L		NC	20
Molinate	<0.097		<0.097		ug/L		NC	20
Naphthalene	<0.097		<0.097		ug/L		NC	20
Parathion	<0.097		<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097		<0.097		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.048		ug/L		NC	20
Pyrene	<0.049		<0.048		ug/L		NC	20
Simazine	<0.049		<0.048		ug/L		NC	20
Terbacil	<0.097		<0.097		ug/L		NC	20
Terbutylazine	<0.097		<0.097		ug/L		NC	20
Thiobencarb	<0.097		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.049		<0.048		ug/L		NC	20
Trifluralin	<0.097		<0.097		ug/L		NC	20

  

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	102		70 - 130

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

**Lab Sample ID: MB 570-528373/1-A**  
**Matrix: Water**  
**Analysis Batch: 532334**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	01/30/25 19:44	02/11/25 11:25	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

Lab Sample ID: MB 570-528373/1-A  
Matrix: Water  
Analysis Batch: 532334

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 528373

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	115		33 - 139	01/30/25 19:44	02/11/25 11:25	1
2-Fluorobiphenyl (Surr)	82		33 - 126	01/30/25 19:44	02/11/25 11:25	1
2-Fluorophenol (Surr)	43		12 - 120	01/30/25 19:44	02/11/25 11:25	1
Nitrobenzene-d5 (Surr)	78		36 - 120	01/30/25 19:44	02/11/25 11:25	1
Phenol-d6 (Surr)	26		10 - 120	01/30/25 19:44	02/11/25 11:25	1
p-Terphenyl-d14 (Surr)	99		47 - 131	01/30/25 19:44	02/11/25 11:25	1

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

Lab Sample ID: MB 570-528373/1-A  
Matrix: Water  
Analysis Batch: 531865

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 528373

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
2-Methylnaphthalene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Acenaphthene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Acenaphthylene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Anthracene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Benzo[a]anthracene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Benzo[a]pyrene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Chrysene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Fluoranthene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Fluorene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Naphthalene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Phenanthrene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1
Pyrene	<0.20		0.20	ug/L		01/30/25 19:44	02/10/25 10:40	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	85		28 - 127	01/30/25 19:44	02/10/25 10:40	1
2-Fluorobiphenyl (Surr)	82		31 - 120	01/30/25 19:44	02/10/25 10:40	1
2-Fluorophenol (Surr)	35		17 - 120	01/30/25 19:44	02/10/25 10:40	1
Nitrobenzene-d5 (Surr)	78		27 - 120	01/30/25 19:44	02/10/25 10:40	1
Phenol-d6 (Surr)	22		10 - 120	01/30/25 19:44	02/10/25 10:40	1
p-Terphenyl-d14 (Surr)	82		45 - 120	01/30/25 19:44	02/10/25 10:40	1

Lab Sample ID: LCS 570-528373/2-A  
Matrix: Water  
Analysis Batch: 531865

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 528373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	20.0	15.0		ug/L		75	43 - 120

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: LCS 570-528373/2-A**  
**Matrix: Water**  
**Analysis Batch: 531865**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	20.0	16.5		ug/L		82	60 - 132
Acenaphthylene	20.0	16.2		ug/L		81	54 - 126
Anthracene	20.0	17.5		ug/L		87	43 - 120
Benzo[a]anthracene	20.0	17.1		ug/L		85	42 - 133
Benzo[a]pyrene	20.0	18.0		ug/L		90	32 - 148
Benzo[b]fluoranthene	20.0	17.3		ug/L		86	42 - 140
Benzo[g,h,i]perylene	20.0	16.7		ug/L		83	1 - 195
Benzo[k]fluoranthene	20.0	17.3		ug/L		87	25 - 146
Chrysene	20.0	16.4		ug/L		82	44 - 140
Dibenz(a,h)anthracene	20.0	16.9		ug/L		85	1 - 200
Fluoranthene	20.0	17.0		ug/L		85	43 - 121
Fluorene	20.0	17.0		ug/L		85	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.4		ug/L		87	1 - 151
Naphthalene	20.0	13.5		ug/L		67	36 - 120
Phenanthrene	20.0	17.5		ug/L		87	65 - 120
Pyrene	20.0	17.4		ug/L		87	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	79		28 - 127
2-Fluorobiphenyl (Surr)	78		31 - 120
2-Fluorophenol (Surr)	42		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	26		10 - 120
p-Terphenyl-d14 (Surr)	81		45 - 120

**Lab Sample ID: LCSD 570-528373/3-A**  
**Matrix: Water**  
**Analysis Batch: 531865**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	12.9		ug/L		64	47 - 120	4	20
2-Methylnaphthalene	20.0	14.1		ug/L		70	43 - 120	6	20
Acenaphthene	20.0	15.6		ug/L		78	60 - 132	5	29
Acenaphthylene	20.0	15.0		ug/L		75	54 - 126	8	45
Anthracene	20.0	16.1		ug/L		80	43 - 120	8	40
Benzo[a]anthracene	20.0	16.9		ug/L		85	42 - 133	1	32
Benzo[a]pyrene	20.0	18.0		ug/L		90	32 - 148	0	43
Benzo[b]fluoranthene	20.0	17.4		ug/L		87	42 - 140	1	43
Benzo[g,h,i]perylene	20.0	16.0		ug/L		80	1 - 195	4	61
Benzo[k]fluoranthene	20.0	17.4		ug/L		87	25 - 146	1	38
Chrysene	20.0	16.4		ug/L		82	44 - 140	0	53
Dibenz(a,h)anthracene	20.0	16.3		ug/L		81	1 - 200	4	75
Fluoranthene	20.0	15.7		ug/L		79	43 - 121	8	40
Fluorene	20.0	15.8		ug/L		79	70 - 120	7	23
Indeno[1,2,3-cd]pyrene	20.0	17.0		ug/L		85	1 - 151	2	60
Naphthalene	20.0	12.6		ug/L		63	36 - 120	7	39
Phenanthrene	20.0	16.0		ug/L		80	65 - 120	9	24
Pyrene	20.0	17.6		ug/L		88	70 - 120	1	30

Eurofins Eaton Analytical Pomona



# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: LCSD 570-528373/3-A**  
**Matrix: Water**  
**Analysis Batch: 531865**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	74		28 - 127
2-Fluorobiphenyl (Surr)	75		31 - 120
2-Fluorophenol (Surr)	43		17 - 120
Nitrobenzene-d5 (Surr)	63		27 - 120
Phenol-d6 (Surr)	27		10 - 120
p-Terphenyl-d14 (Surr)	85		45 - 120

**Lab Sample ID: 380-132646-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 531865**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec Limits
				Result	Qualifier				
1-Methylnaphthalene	<0.19		19.1	11.7		ug/L		61	36 - 120
2-Methylnaphthalene	<0.19		19.1	13.1		ug/L		69	32 - 124
Acenaphthene	<0.19		19.1	13.8		ug/L		72	47 - 145
Acenaphthylene	<0.19		19.1	13.3		ug/L		70	33 - 145
Anthracene	<0.19		19.1	14.9		ug/L		78	27 - 133
Benzo[a]anthracene	<0.19		19.1	16.5		ug/L		87	33 - 143
Benzo[a]pyrene	<0.19		19.1	17.8		ug/L		93	17 - 163
Benzo[b]fluoranthene	<0.19		19.1	17.1		ug/L		90	24 - 159
Benzo[g,h,i]perylene	<0.19		19.1	16.3		ug/L		85	1 - 219
Benzo[k]fluoranthene	<0.19		19.1	16.9		ug/L		89	11 - 162
Chrysene	<0.19		19.1	15.9		ug/L		83	17 - 168
Dibenz(a,h)anthracene	<0.19		19.1	16.9		ug/L		88	1 - 227
Fluoranthene	<0.19		19.1	15.4		ug/L		81	26 - 137
Fluorene	<0.19		19.1	14.4		ug/L		75	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.1	16.8		ug/L		88	1 - 171
Naphthalene	<0.19		19.1	11.9		ug/L		62	21 - 133
Phenanthrene	<0.19		19.1	14.8		ug/L		77	54 - 120
Pyrene	<0.19		19.1	17.0		ug/L		89	52 - 120

Surrogate	MS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	70		28 - 127
2-Fluorobiphenyl (Surr)	66		31 - 120
2-Fluorophenol (Surr)	36		17 - 120
Nitrobenzene-d5 (Surr)	57		27 - 120
Phenol-d6 (Surr)	22		10 - 120
p-Terphenyl-d14 (Surr)	82		45 - 120

**Lab Sample ID: 380-132646-A-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 531865**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 528373**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
				Result	Qualifier						
1-Methylnaphthalene	<0.19		19.4	12.5		ug/L		64	36 - 120	7	30
2-Methylnaphthalene	<0.19		19.4	13.7		ug/L		71	32 - 124	5	30
Acenaphthene	<0.19		19.4	15.7		ug/L		81	47 - 145	13	48
Acenaphthylene	<0.19		19.4	15.2		ug/L		78	33 - 145	14	74

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: 380-132646-A-1-B MSD**

**Client Sample ID: Matrix Spike Duplicate**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 531865**

**Prep Batch: 528373**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Anthracene	<0.19		19.4	16.8		ug/L		87	27 - 133	12	66
Benzo[a]anthracene	<0.19		19.4	17.8		ug/L		91	33 - 143	7	53
Benzo[a]pyrene	<0.19		19.4	19.4		ug/L		100	17 - 163	9	72
Benzo[b]fluoranthene	<0.19		19.4	18.3		ug/L		94	24 - 159	7	71
Benzo[g,h,i]perylene	<0.19		19.4	18.0		ug/L		93	1 - 219	10	97
Benzo[k]fluoranthene	<0.19		19.4	18.1		ug/L		93	11 - 162	7	63
Chrysene	<0.19		19.4	17.3		ug/L		89	17 - 168	8	87
Dibenz(a,h)anthracene	<0.19		19.4	18.6		ug/L		96	1 - 227	10	126
Fluoranthene	<0.19		19.4	16.8		ug/L		86	26 - 137	8	66
Fluorene	<0.19		19.4	16.2		ug/L		83	59 - 121	12	38
Indeno[1,2,3-cd]pyrene	<0.19		19.4	18.6		ug/L		95	1 - 171	10	99
Naphthalene	<0.19		19.4	12.6		ug/L		65	21 - 133	6	65
Phenanthrene	<0.19		19.4	17.0		ug/L		87	54 - 120	14	39
Pyrene	<0.19		19.4	18.0		ug/L		93	52 - 120	6	49

  

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	75		28 - 127
2-Fluorobiphenyl (Surr)	73		31 - 120
2-Fluorophenol (Surr)	39		17 - 120
Nitrobenzene-d5 (Surr)	63		27 - 120
Phenol-d6 (Surr)	25		10 - 120
p-Terphenyl-d14 (Surr)	82		45 - 120

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

**Lab Sample ID: MB 570-528518/6**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 528518**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			01/31/25 12:01	1

  

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	92		38 - 134		01/31/25 12:01	1

**Lab Sample ID: LCS 570-528518/4**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 528518**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Gasoline Range Organics (C4-C13)	400	418		ug/L		104	78 - 120

  

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

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

**Lab Sample ID: LCSD 570-528518/5**  
**Matrix: Water**  
**Analysis Batch: 528518**

**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	418		ug/L		105	78 - 120	0	10
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>				<b>Limits</b>		
4-Bromofluorobenzene (Surr)		96					38 - 134		

**Lab Sample ID: MRL 570-528518/3**  
**Matrix: Water**  
**Analysis Batch: 528518**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	10.0	10.6		ug/L		106	50 - 150		
<b>Surrogate</b>		<b>MRL %Recovery</b>	<b>MRL Qualifier</b>				<b>Limits</b>		
4-Bromofluorobenzene (Surr)		90					38 - 134		

**Lab Sample ID: 380-132646-C-1 MS**  
**Matrix: Water**  
**Analysis Batch: 528518**

**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	RPD	RPD Limit
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)		94							38 - 134		

**Lab Sample ID: 380-132646-C-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 528518**

**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	398		ug/L		100	68 - 122	7	18
<b>Surrogate</b>		<b>MSD %Recovery</b>		<b>MSD Qualifier</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)		95							38 - 134		

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

**Lab Sample ID: MB 570-528773/1-A**  
**Matrix: Water**  
**Analysis Batch: 528995**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 528773**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		01/31/25 18:43	02/02/25 15:35	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		01/31/25 18:43	02/02/25 15:35	1
C8-C18	<25		25	ug/L		01/31/25 18:43	02/02/25 15:35	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

Surrogate	MB MB %Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	91		60 - 130	01/31/25 18:43	02/02/25 15:35	1

**Lab Sample ID: LCS 570-528773/2-A**  
Matrix: Water  
Analysis Batch: 528995

**Client Sample ID: Lab Control Sample**  
Prep Type: Total/NA  
Prep Batch: 528773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1360		ug/L		85	56 - 127

Surrogate	LCS LCS %Recovery	Qualifier	Limits
<i>n</i> -Octacosane (Surr)	91		60 - 130

**Lab Sample ID: LCSD 570-528773/3-A**  
Matrix: Water  
Analysis Batch: 528995

**Client Sample ID: Lab Control Sample Dup**  
Prep Type: Total/NA  
Prep Batch: 528773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C10-C28	1600	1420		ug/L		89	56 - 127	4	23

Surrogate	LCSD LCSD %Recovery	Qualifier	Limits
<i>n</i> -Octacosane (Surr)	93		60 - 130

**Lab Sample ID: MRL 570-528773/4-A**  
Matrix: Water  
Analysis Batch: 528995

**Client Sample ID: Lab Control Sample**  
Prep Type: Total/NA  
Prep Batch: 528773

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	0.0290		mg/L		145	50 - 150

Surrogate	MRL MRL %Recovery	Qualifier	Limits
<i>n</i> -Octacosane (Surr)	98		60 - 130

**Lab Sample ID: 380-132646-B-1-A MS**  
Matrix: Water  
Analysis Batch: 528995

**Client Sample ID: Matrix Spike**  
Prep Type: Total/NA  
Prep Batch: 528773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<26		1630	1490		ug/L		91	70 - 130

Surrogate	MS MS %Recovery	Qualifier	Limits
<i>n</i> -Octacosane (Surr)	95		60 - 130

**Lab Sample ID: 380-132646-B-1-B MSD**  
Matrix: Water  
Analysis Batch: 528995

**Client Sample ID: Matrix Spike Duplicate**  
Prep Type: Total/NA  
Prep Batch: 528773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C10-C28	<26		1660	1480		ug/L		89	70 - 130	1	20

# QC Sample Results

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

Job ID: 380-132659-1  
SDG: Weekly

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

Lab Sample ID: 380-132646-B-1-B MSD  
Matrix: Water  
Analysis Batch: 528995

Client Sample ID: Matrix Spike Duplicate  
Prep Type: Total/NA  
Prep Batch: 528773

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>n-Octacosane (Surr)</i>	94		60 - 130

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# QC Association Summary

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

Job ID: 380-132659-1  
SDG: Weekly

## GC/MS Semi VOA

### Prep Batch: 131760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	525.2	
MB 380-131760/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-131760/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-131760/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-132662-B-3-A MS	Matrix Spike	Total/NA	Water	525.2	
380-132646-B-3-A DU	Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 131948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	525.2	131760
MB 380-131760/21-A	Method Blank	Total/NA	Water	525.2	131760
LCS 380-131760/23-A	Lab Control Sample	Total/NA	Water	525.2	131760
MRL 380-131760/22-A	Lab Control Sample	Total/NA	Water	525.2	131760
380-132662-B-3-A MS	Matrix Spike	Total/NA	Water	525.2	131760
380-132646-B-3-A DU	Duplicate	Total/NA	Water	525.2	131760

### Prep Batch: 528373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	625.1	
MB 570-528373/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-528373/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-528373/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-132646-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-132646-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

### Analysis Batch: 531865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	625.1 SIM	528373
MB 570-528373/1-A	Method Blank	Total/NA	Water	625.1 SIM	528373
LCS 570-528373/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	528373
LCSD 570-528373/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	528373
380-132646-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	528373
380-132646-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	528373

### Analysis Batch: 532334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	625.1	528373
MB 570-528373/1-A	Method Blank	Total/NA	Water	625.1	528373

## GC VOA

### Analysis Batch: 528518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	8015B GRO LL	
380-132659-2	TB: Ka'amilo Wells	Total/NA	Water	8015B GRO LL	
MB 570-528518/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-528518/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-528518/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-528518/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-132646-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-132646-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

Eurofins Eaton Analytical Pomona

# QC Association Summary

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

Job ID: 380-132659-1  
 SDG: Weekly

## GC Semi VOA

### Prep Batch: 528773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	3510C	
MB 570-528773/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-528773/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-528773/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-528773/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-132646-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-132646-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 528995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-132659-1	Ka'amilo Wells	Total/NA	Water	8015B	528773
MB 570-528773/1-A	Method Blank	Total/NA	Water	8015B	528773
LCS 570-528773/2-A	Lab Control Sample	Total/NA	Water	8015B	528773
LCSD 570-528773/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	528773
MRL 570-528773/4-A	Lab Control Sample	Total/NA	Water	8015B	528773
380-132646-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	528773
380-132646-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	528773

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# Lab Chronicle

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

Job ID: 380-132659-1  
 SDG: Weekly

## Client Sample ID: Ka'amilo Wells

## Lab Sample ID: 380-132659-1

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			131760	OTM3	EA POM	01/31/25 07:59
Total/NA	Analysis	525.2		1	131948	Q8LA	EA POM	02/01/25 11:31
Total/NA	Prep	625.1			528373	UD4J	EET CAL 4	01/30/25 19:44
Total/NA	Analysis	625.1		1	532334	CG	EET CAL 4	02/11/25 12:34
Total/NA	Prep	625.1			528373	UD4J	EET CAL 4	01/30/25 19:44
Total/NA	Analysis	625.1 SIM		1	531865	PQS1	EET CAL 4	02/10/25 15:46
Total/NA	Analysis	8015B GRO LL		1	528518	A9VE	EET CAL 4	01/31/25 15:11
Total/NA	Prep	3510C			528773	TVD6	EET CAL 4	01/31/25 18:43
Total/NA	Analysis	8015B		1	528995	H6FE	EET CAL 4	02/02/25 18:03

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

## Lab Sample ID: 380-132659-2

Date Collected: 01/27/25 11:57

Matrix: Water

Date Received: 01/29/25 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	528518	A9VE	EET CAL 4	01/31/25 18:11

**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: 380-132659-1  
 SDG: Weekly

## Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-25 *

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
Arizona	State	AZ0830	11-16-25
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25

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

Eurofins Eaton Analytical Pomona

# Accreditation/Certification Summary

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

Job ID: 380-132659-1  
SDG: Weekly

## Laboratory: Eurofins Calscience (Continued)

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

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

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# Method Summary

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

Job ID: 380-132659-1  
SDG: Weekly

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

#### Protocol References:

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

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

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

# Sample Summary

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

Job ID: 380-132659-1  
SDG: Weekly

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<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-132659-1	Ka'amilo Wells	Water	01/27/25 11:57	01/29/25 10:20
380-132659-2	TB: Ka'amilo Wells	Water	01/27/25 11:57	01/29/25 10:20

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# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-132659-1

SDG Number: Weekly

**Login Number: 132659**

**List Number: 1**

**Creator: Segura, Ryan**

**List Source: Eurofins Eaton Analytical Pomona**

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



# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-132659-1

SDG Number: Weekly

**Login Number: 132659**

**List Number: 2**

**Creator: Khana, Piyush**

**List Source: Eurofins Calscience**

**List Creation: 01/30/25 05:04 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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	

