

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Ka'amilo Wells Pump 1/Pump 2

JOB NUMBER

380-159504-1

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: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
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 VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate 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: 380-159504-1

Job ID: 380-159504-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-159504-1

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 7/9/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.6°C and 1.6°C.

GC/MS Semi VOA

Method 625.1: The continuing calibration verification (CCV) associated with batch 570-600481 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCVIS 570-600481/1002).

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

Gasoline Range Organics

Method 8015B_GRO_LL: One or more containers for the following sample was received broken or leaking: Ka'amilo Wells Pump 1 (380-159504-1). 1 of 3 Vials for 8015B_GRO method received broken.

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

Diesel Range Organics

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

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Detection Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.075		0.0098	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.014		0.0098	ug/L	1		525.2	Total/NA

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

Lab Sample ID: 380-159504-2

No Detections.

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.058		0.0097	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.011		0.0097	ug/L	1		525.2	Total/NA

Client Sample ID: TB: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-4

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: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2,4'-DDD	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2,4'-DDE	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2,4'-DDT	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
2-Methylnaphthalene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
4,4'-DDD	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
4,4'-DDE	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
4,4'-DDT	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Acenaphthene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Acenaphthylene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Acetochlor	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Alachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
alpha-BHC	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
alpha-Chlordane	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Anthracene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 16:27	1
Atrazine	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Benz(a)anthracene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 16:27	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 16:27	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 16:27	1
beta-BHC	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 16:27	1
Bromacil	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Butachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Butylbenzylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 16:27	1
Chlorobenzilate	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Chloroneb	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Chlorpyrifos	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Chrysene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 16:27	1
delta-BHC	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 16:27	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Dieldrin	0.075		0.0098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Diethylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 16:27	1
Dimethylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 16:27	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		07/11/25 07:36	07/11/25 16:27	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Endosulfan sulfate	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Endrin	<0.0098		0.0098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Endrin aldehyde	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
EPTC	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Fluoranthene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1

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Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
gamma-Chlordane	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Heptachlor	<0.0098		0.0098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Heptachlor epoxide (isomer B)	0.014		0.0098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Hexachlorobenzene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Isophorone	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Lindane	<0.0098		0.0098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Malathion	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Methoxychlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Metolachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Molinate	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Naphthalene	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Parathion	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Phenanthrene	<0.039		0.039	ug/L		07/11/25 07:36	07/11/25 16:27	1
Propachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Pyrene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Simazine	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Terbacil	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Terbutylazine	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Thiobencarb	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/11/25 07:36	07/11/25 16:27	1
trans-Nonachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 16:27	1
Trifluralin	<0.098		0.098	ug/L		07/11/25 07:36	07/11/25 16:27	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/11/25 07:36	07/11/25 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	92		70 - 130	07/11/25 07:36	07/11/25 16:27	1
Perylene-d12	95		70 - 130	07/11/25 07:36	07/11/25 16:27	1
Triphenylphosphate	115		70 - 130	07/11/25 07:36	07/11/25 16:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
2-Methylnaphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Acenaphthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Acenaphthylene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Benzo[a]anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Benzo[a]pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Chrysene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1

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Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Naphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Phenanthrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1
Pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		28 - 127	07/12/25 10:28	07/22/25 17:07	1
2-Fluorobiphenyl (Surr)	69		31 - 120	07/12/25 10:28	07/22/25 17:07	1
2-Fluorophenol (Surr)	41		17 - 120	07/12/25 10:28	07/22/25 17:07	1
Nitrobenzene-d5 (Surr)	72		27 - 120	07/12/25 10:28	07/22/25 17:07	1
Phenol-d6 (Surr)	26		10 - 120	07/12/25 10:28	07/22/25 17:07	1
p-Terphenyl-d14 (Surr)	91		45 - 120	07/12/25 10:28	07/22/25 17:07	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	07/12/25 10:28	07/22/25 16:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	54		33 - 139	07/12/25 10:28	07/22/25 16:06	1
2-Fluorobiphenyl (Surr)	59		33 - 126	07/12/25 10:28	07/22/25 16:06	1
2-Fluorophenol (Surr)	31		12 - 120	07/12/25 10:28	07/22/25 16:06	1
Nitrobenzene-d5 (Surr)	57		36 - 120	07/12/25 10:28	07/22/25 16:06	1
Phenol-d6 (Surr)	18		10 - 120	07/12/25 10:28	07/22/25 16:06	1
p-Terphenyl-d14 (Surr)	75		47 - 131	07/12/25 10:28	07/22/25 16:06	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			07/20/25 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		38 - 134		07/20/25 18:47	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		07/14/25 10:41	07/19/25 04:59	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		07/14/25 10:41	07/19/25 04:59	1
C8-C18	<26		26	ug/L		07/14/25 10:41	07/19/25 04:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	96		60 - 130	07/14/25 10:41	07/19/25 04:59	1

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

Lab Sample ID: 380-159504-2

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

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			07/20/25 23:32	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: 380-159504-2

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		38 - 134		07/20/25 23:32	1

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Date Collected: 07/07/25 12:21

Matrix: Water

Date Received: 07/09/25 09:30

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		07/11/25 07:36	07/11/25 16:48	1
2,4'-DDD	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
2,4'-DDE	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
2,4'-DDT	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
2-Methylnaphthalene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
4,4'-DDD	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
4,4'-DDE	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
4,4'-DDT	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Acenaphthene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Acenaphthylene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Acetochlor	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Alachlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
alpha-BHC	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
alpha-Chlordane	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Anthracene	<0.019		0.019	ug/L		07/11/25 07:36	07/11/25 16:48	1
Atrazine	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Benz(a)anthracene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Benzo[a]pyrene	<0.019		0.019	ug/L		07/11/25 07:36	07/11/25 16:48	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		07/11/25 07:36	07/11/25 16:48	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		07/11/25 07:36	07/11/25 16:48	1
beta-BHC	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		07/11/25 07:36	07/11/25 16:48	1
Bromacil	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Butachlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Butylbenzylphthalate	<0.48		0.48	ug/L		07/11/25 07:36	07/11/25 16:48	1
Chlorobenzilate	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Chloroneb	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Chlorpyrifos	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Chrysene	<0.019		0.019	ug/L		07/11/25 07:36	07/11/25 16:48	1
delta-BHC	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		07/11/25 07:36	07/11/25 16:48	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Dieldrin	0.058		0.0097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Diethylphthalate	<0.48		0.48	ug/L		07/11/25 07:36	07/11/25 16:48	1
Dimethylphthalate	<0.48		0.48	ug/L		07/11/25 07:36	07/11/25 16:48	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		07/11/25 07:36	07/11/25 16:48	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1

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Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Date Collected: 07/07/25 12:21

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I (Alpha)	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Endosulfan sulfate	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Endrin	<0.0097		0.0097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Endrin aldehyde	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
EPTC	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Fluoranthene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Fluorene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
gamma-Chlordane	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Heptachlor	<0.0097		0.0097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Heptachlor epoxide (isomer B)	0.011		0.0097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Hexachlorobenzene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Isophorone	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Lindane	<0.0097		0.0097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Malathion	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Methoxychlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Metolachlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Molinate	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Naphthalene	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Parathion	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Phenanthrene	<0.039		0.039	ug/L		07/11/25 07:36	07/11/25 16:48	1
Propachlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Pyrene	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Simazine	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Terbacil	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Terbutylazine	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Thiobencarb	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		07/11/25 07:36	07/11/25 16:48	1
trans-Nonachlor	<0.048		0.048	ug/L		07/11/25 07:36	07/11/25 16:48	1
Trifluralin	<0.097		0.097	ug/L		07/11/25 07:36	07/11/25 16:48	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/11/25 07:36	07/11/25 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	07/11/25 07:36	07/11/25 16:48	1
Perylene-d12	92		70 - 130	07/11/25 07:36	07/11/25 16:48	1
Triphenylphosphate	112		70 - 130	07/11/25 07:36	07/11/25 16:48	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		07/12/25 10:28	07/22/25 17:29	1
2-Methylnaphthalene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Acenaphthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Acenaphthylene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Benzo[a]anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1

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Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Date Collected: 07/07/25 12:21

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Chrysene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Fluorene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Naphthalene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Phenanthrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1
Pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	90		28 - 127	07/12/25 10:28	07/22/25 17:29	1
2-Fluorobiphenyl (Surr)	79		31 - 120	07/12/25 10:28	07/22/25 17:29	1
2-Fluorophenol (Surr)	47		17 - 120	07/12/25 10:28	07/22/25 17:29	1
Nitrobenzene-d5 (Surr)	82		27 - 120	07/12/25 10:28	07/22/25 17:29	1
Phenol-d6 (Surr)	29		10 - 120	07/12/25 10:28	07/22/25 17:29	1
p-Terphenyl-d14 (Surr)	86		45 - 120	07/12/25 10:28	07/22/25 17:29	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	07/12/25 10:28	07/22/25 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	59		33 - 139	07/12/25 10:28	07/22/25 16:30	1
2-Fluorobiphenyl (Surr)	72		33 - 126	07/12/25 10:28	07/22/25 16:30	1
2-Fluorophenol (Surr)	38		12 - 120	07/12/25 10:28	07/22/25 16:30	1
Nitrobenzene-d5 (Surr)	81		36 - 120	07/12/25 10:28	07/22/25 16:30	1
Phenol-d6 (Surr)	16		10 - 120	07/12/25 10:28	07/22/25 16:30	1
p-Terphenyl-d14 (Surr)	75		47 - 131	07/12/25 10:28	07/22/25 16:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			07/20/25 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		38 - 134		07/20/25 19:09	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		07/14/25 10:41	07/19/25 05:21	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		07/14/25 10:41	07/19/25 05:21	1
C8-C18	<26		26	ug/L		07/14/25 10:41	07/19/25 05:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	102		60 - 130	07/14/25 10:41	07/19/25 05:21	1

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Client Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: TB: Ka'amilo Wells Pump 2 Lab Sample ID: 380-159504-4
Date Collected: 07/07/25 12:21 Matrix: Water
Date Received: 07/09/25 09:30

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			07/20/25 23:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		38 - 134				07/20/25 23:53	1	

Action Limit Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.014		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.20		ug/L	0.2	0.20	625.1 SIM	Total/NA

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0097		ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.011		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: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-159057-Y-1-A MS	Matrix Spike	92	98	114
380-159447-D-1-A DU	Duplicate	93	94	111
380-159504-1	Ka'amilo Wells Pump 1	92	95	115
380-159504-3	Ka'amilo Wells Pump 2	95	92	112
LCS 380-162217/23-A	Lab Control Sample	93	100	114
LCSD 380-162217/24-A	Lab Control Sample Dup	93	99	117
MB 380-162217/21-A	Method Blank	93	92	111
MRL 380-162217/22-A	Lab Control Sample	94	94	115

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-159504-1	Ka'amilo Wells Pump 1	54	59	31	57	18	75
380-159504-3	Ka'amilo Wells Pump 2	59	72	38	81	16	75
MB 570-593529/1-A	Method Blank	54	62	33	66	21	63

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-159504-1	Ka'amilo Wells Pump 1	89	69	41	72	26	91
380-159504-3	Ka'amilo Wells Pump 2	90	79	47	82	29	86
LCS 570-596307/2-A	Lab Control Sample	93	91	55	79	35	92
LCSD 570-596307/3-A	Lab Control Sample Dup	93	89	56	88	36	88
MB 570-596307/1-A	Method Blank	93	72	41	73	24	92

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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)
380-159486-C-1 MS	Matrix Spike	98
380-159486-C-1 MSD	Matrix Spike Duplicate	100
380-159504-1	Ka'amilo Wells Pump 1	86
380-159504-2	TB: Ka'amilo Wells Pump 1	82
380-159504-3	Ka'amilo Wells Pump 2	77
380-159504-4	TB: Ka'amilo Wells Pump 2	82
LCS 570-599688/1008	Lab Control Sample	99
LCSD 570-599688/9	Lab Control Sample Dup	89
MB 570-599688/10	Method Blank	79
MRL 570-599688/11	Lab Control Sample	82

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)
380-159486-B-1-B MS	Matrix Spike	111
380-159486-B-1-C MSD	Matrix Spike Duplicate	109
380-159504-1	Ka'amilo Wells Pump 1	96
380-159504-3	Ka'amilo Wells Pump 2	102
LCS 570-596824/2-A	Lab Control Sample	105
LCSD 570-596824/3-A	Lab Control Sample Dup	101
MB 570-596824/1-A	Method Blank	92
MRL 570-596824/4-A	Lab Control Sample	94

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MB 380-162217/21-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 162217

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2,4'-DDD	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2,4'-DDE	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2,4'-DDT	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
2-Methylnaphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
4,4'-DDD	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
4,4'-DDE	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
4,4'-DDT	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Acenaphthene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Acenaphthylene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Acetochlor	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Alachlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
alpha-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
alpha-Chlordane	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Anthracene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 14:03	1
Atrazine	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Benz(a)anthracene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 14:03	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 14:03	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 14:03	1
beta-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 14:03	1
Bromacil	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Butachlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Butylbenzylphthalate	<0.50		0.50	ug/L		07/11/25 07:36	07/11/25 14:03	1
Chlorobenzilate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Chloroneb	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Chlorpyrifos	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Chrysene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 14:03	1
delta-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 14:03	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Dieldrin	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Diethylphthalate	<0.50		0.50	ug/L		07/11/25 07:36	07/11/25 14:03	1
Dimethylphthalate	<0.50		0.50	ug/L		07/11/25 07:36	07/11/25 14:03	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		07/11/25 07:36	07/11/25 14:03	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Endosulfan sulfate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Endrin	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Endrin aldehyde	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
EPTC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MB 380-162217/21-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 162217

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Fluorene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
gamma-Chlordane	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Heptachlor	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Hexachlorobenzene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Isophorone	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Lindane	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Malathion	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Methoxychlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Metolachlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Molinate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Naphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Parathion	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Phenanthrene	<0.040		0.040	ug/L		07/11/25 07:36	07/11/25 14:03	1
Propachlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Pyrene	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Simazine	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Terbacil	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Terbutylazine	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Thiobencarb	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/11/25 07:36	07/11/25 14:03	1
trans-Nonachlor	<0.050		0.050	ug/L		07/11/25 07:36	07/11/25 14:03	1
Trifluralin	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 14:03	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclopentene, 1,2,3,3,4-pentamethyl-	0.526	T J N	ug/L		2.50	197390-29-7	07/11/25 07:36	07/11/25 14:03	1
Decane	2.66	T J N	ug/L		2.76	124-18-5	07/11/25 07:36	07/11/25 14:03	1
Phenol, m-tert-butyl-	0.716	T J N	ug/L		3.84	585-34-2	07/11/25 07:36	07/11/25 14:03	1
9-Octadecenamide, (Z)-	0.783	T J N	ug/L		7.87	301-02-0	07/11/25 07:36	07/11/25 14:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	93		70 - 130	07/11/25 07:36	07/11/25 14:03	1
Perylene-d12	92		70 - 130	07/11/25 07:36	07/11/25 14:03	1
Triphenylphosphate	111		70 - 130	07/11/25 07:36	07/11/25 14:03	1

Lab Sample ID: LCS 380-162217/23-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.98	1.81		ug/L		91	70 - 130
2,4'-DDD	1.98	2.18		ug/L		110	70 - 130
2,4'-DDE	1.98	2.00		ug/L		101	70 - 130
2,4'-DDT	1.98	2.01		ug/L		101	70 - 130

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: LCS 380-162217/23-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1.98	2.21		ug/L		111	70 - 130
2,6-Dinitrotoluene	1.98	1.93		ug/L		97	70 - 130
2-Methylnaphthalene	1.98	1.85		ug/L		93	70 - 130
4,4'-DDD	1.98	2.17		ug/L		109	70 - 130
4,4'-DDE	1.98	2.16		ug/L		109	70 - 130
4,4'-DDT	1.98	1.97		ug/L		99	70 - 130
Acenaphthene	1.98	1.81		ug/L		91	70 - 130
Acenaphthylene	1.98	1.98		ug/L		100	70 - 130
Acetochlor	1.98	1.97		ug/L		99	70 - 130
Alachlor	1.98	1.98		ug/L		100	70 - 130
alpha-BHC	1.98	1.85		ug/L		93	70 - 130
alpha-Chlordane	1.98	2.33		ug/L		117	70 - 130
Anthracene	1.98	1.91		ug/L		96	70 - 130
Atrazine	1.98	2.05		ug/L		103	70 - 130
Benz(a)anthracene	1.98	2.00		ug/L		101	70 - 130
Benzo[a]pyrene	1.98	2.17		ug/L		109	70 - 130
Benzo[b]fluoranthene	1.98	2.07		ug/L		105	70 - 130
Benzo[g,h,i]perylene	1.98	1.89		ug/L		95	70 - 130
Benzo[k]fluoranthene	1.98	2.13		ug/L		107	70 - 130
beta-BHC	1.98	1.85		ug/L		93	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	1.78		ug/L		90	70 - 130
Bromacil	1.98	2.04		ug/L		103	70 - 130
Butachlor	1.98	1.99		ug/L		100	70 - 130
Butylbenzylphthalate	1.98	1.93		ug/L		97	70 - 130
Chlorobenzilate	1.98	1.80		ug/L		91	70 - 130
Chloroneb	1.98	1.87		ug/L		94	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	2.14		ug/L		108	70 - 130
Chlorpyrifos	1.98	2.07		ug/L		104	70 - 130
Chrysene	1.98	1.93		ug/L		97	70 - 130
delta-BHC	1.98	1.76		ug/L		89	70 - 130
Di(2-ethylhexyl)adipate	1.98	1.90		ug/L		96	70 - 130
Dibenz(a,h)anthracene	1.98	2.00		ug/L		101	70 - 130
Diclorvos (DDVP)	1.98	1.92		ug/L		97	70 - 130
Dieldrin	1.98	1.96		ug/L		99	70 - 130
Diethylphthalate	1.98	1.98		ug/L		100	70 - 130
Dimethylphthalate	1.98	1.97		ug/L		99	70 - 130
Di-n-butyl phthalate	3.97	4.34		ug/L		110	70 - 130
Di-n-octyl phthalate	1.98	1.88		ug/L		95	70 - 130
Endosulfan I (Alpha)	1.98	1.88		ug/L		95	70 - 130
Endosulfan II (Beta)	1.98	1.85		ug/L		93	70 - 130
Endosulfan sulfate	1.98	1.94		ug/L		98	70 - 130
Endrin	1.98	2.21		ug/L		112	70 - 130
Endrin aldehyde	1.98	2.26		ug/L		114	60 - 130
EPTC	1.98	1.95		ug/L		98	70 - 130
Fluoranthene	1.98	2.07		ug/L		104	70 - 130
Fluorene	1.98	1.94		ug/L		98	70 - 130
gamma-Chlordane	1.98	2.28		ug/L		115	70 - 130
Heptachlor	1.98	2.20		ug/L		111	70 - 130
Heptachlor epoxide (isomer B)	1.98	2.23		ug/L		113	70 - 130

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: LCS 380-162217/23-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	1.98	1.97		ug/L		99	70 - 130
Hexachlorocyclopentadiene	1.98	2.15		ug/L		109	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	2.20		ug/L		111	70 - 130
Isophorone	1.98	2.05		ug/L		104	70 - 130
Lindane	1.98	1.99		ug/L		100	70 - 130
Malathion	1.98	2.01		ug/L		102	70 - 130
Methoxychlor	1.98	2.14		ug/L		108	70 - 130
Metolachlor	1.98	2.09		ug/L		105	70 - 130
Molinate	1.98	1.96		ug/L		99	70 - 130
Naphthalene	1.98	1.81		ug/L		91	70 - 130
Parathion	1.98	1.84		ug/L		93	70 - 130
Pendimethalin (Penoxaline)	1.98	2.33		ug/L		117	70 - 130
Phenanthrene	1.98	1.79		ug/L		90	70 - 130
Propachlor	1.98	1.89		ug/L		95	70 - 130
Pyrene	1.98	2.10		ug/L		106	70 - 130
Simazine	1.98	1.86		ug/L		94	70 - 130
Terbacil	1.98	1.95		ug/L		98	70 - 130
Terbutylazine	1.98	1.98		ug/L		100	70 - 130
Thiobencarb	1.98	1.99		ug/L		100	70 - 130
trans-Nonachlor	1.98	2.38		ug/L		120	70 - 130
Trifluralin	1.98	2.22		ug/L		112	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	100		70 - 130
Triphenylphosphate	114		70 - 130

Lab Sample ID: LCSD 380-162217/24-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.98	1.87		ug/L		94	70 - 130	3	20
2,4'-DDD	1.98	2.27		ug/L		115	70 - 130	4	20
2,4'-DDE	1.98	2.10		ug/L		106	70 - 130	5	20
2,4'-DDT	1.98	2.09		ug/L		105	70 - 130	4	20
2,4-Dinitrotoluene	1.98	2.22		ug/L		112	70 - 130	0	20
2,6-Dinitrotoluene	1.98	1.89		ug/L		95	70 - 130	2	20
2-Methylnaphthalene	1.98	1.90		ug/L		96	70 - 130	3	20
4,4'-DDD	1.98	2.26		ug/L		114	70 - 130	4	20
4,4'-DDE	1.98	2.24		ug/L		113	70 - 130	4	20
4,4'-DDT	1.98	2.02		ug/L		102	70 - 130	3	20
Acenaphthene	1.98	1.88		ug/L		95	70 - 130	4	20
Acenaphthylene	1.98	2.10		ug/L		106	70 - 130	6	20
Acetochlor	1.98	2.06		ug/L		104	70 - 130	4	20
Alachlor	1.98	2.09		ug/L		105	70 - 130	5	20
alpha-BHC	1.98	1.95		ug/L		98	70 - 130	6	20
alpha-Chlordane	1.98	2.40		ug/L		121	70 - 130	3	20

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: LCSD 380-162217/24-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Anthracene	1.98	2.01		ug/L		101	70 - 130	5	20
Atrazine	1.98	2.19		ug/L		111	70 - 130	7	20
Benz(a)anthracene	1.98	2.13		ug/L		108	70 - 130	6	20
Benzo[a]pyrene	1.98	2.24		ug/L		113	70 - 130	3	20
Benzo[b]fluoranthene	1.98	2.26		ug/L		114	70 - 130	8	20
Benzo[g,h,i]perylene	1.98	1.96		ug/L		99	70 - 130	4	20
Benzo[k]fluoranthene	1.98	2.12		ug/L		107	70 - 130	0	20
beta-BHC	1.98	1.95		ug/L		98	70 - 130	5	20
Bis(2-ethylhexyl) phthalate	1.98	1.72		ug/L		87	70 - 130	3	20
Bromacil	1.98	2.07		ug/L		104	70 - 130	2	20
Butachlor	1.98	2.11		ug/L		107	70 - 130	6	20
Butylbenzylphthalate	1.98	2.07		ug/L		104	70 - 130	7	20
Chlorobenzilate	1.98	1.92		ug/L		97	70 - 130	6	20
Chloroneb	1.98	1.96		ug/L		99	70 - 130	5	20
Chlorothalonil (Draconil, Bravo)	1.98	2.26		ug/L		114	70 - 130	6	20
Chlorpyrifos	1.98	2.17		ug/L		109	70 - 130	4	20
Chrysene	1.98	2.02		ug/L		102	70 - 130	5	20
delta-BHC	1.98	1.84		ug/L		93	70 - 130	4	20
Di(2-ethylhexyl)adipate	1.98	1.88		ug/L		95	70 - 130	1	20
Dibenz(a,h)anthracene	1.98	2.01		ug/L		102	70 - 130	1	20
Diclorvos (DDVP)	1.98	1.99		ug/L		100	70 - 130	3	20
Dieldrin	1.98	2.05		ug/L		104	70 - 130	4	20
Diethylphthalate	1.98	2.10		ug/L		106	70 - 130	6	20
Dimethylphthalate	1.98	2.04		ug/L		103	70 - 130	4	20
Di-n-butyl phthalate	3.97	4.72		ug/L		119	70 - 130	8	20
Di-n-octyl phthalate	1.98	1.81		ug/L		91	70 - 130	4	20
Endosulfan I (Alpha)	1.98	1.97		ug/L		99	70 - 130	5	20
Endosulfan II (Beta)	1.98	1.95		ug/L		98	70 - 130	5	20
Endosulfan sulfate	1.98	2.04		ug/L		103	70 - 130	5	20
Endrin	1.98	2.34		ug/L		118	70 - 130	5	20
Endrin aldehyde	1.98	2.29		ug/L		116	60 - 130	1	20
EPTC	1.98	2.02		ug/L		102	70 - 130	4	20
Fluoranthene	1.98	2.19		ug/L		110	70 - 130	6	20
Fluorene	1.98	2.02		ug/L		102	70 - 130	4	20
gamma-Chlordane	1.98	2.35		ug/L		118	70 - 130	3	20
Heptachlor	1.98	2.34		ug/L		118	70 - 130	6	20
Heptachlor epoxide (isomer B)	1.98	2.36		ug/L		119	70 - 130	5	20
Hexachlorobenzene	1.98	2.11		ug/L		106	70 - 130	7	20
Hexachlorocyclopentadiene	1.98	2.24		ug/L		113	70 - 130	4	20
Indeno[1,2,3-cd]pyrene	1.98	2.23		ug/L		112	70 - 130	1	20
Isophorone	1.98	2.13		ug/L		108	70 - 130	4	20
Lindane	1.98	2.10		ug/L		106	70 - 130	6	20
Malathion	1.98	2.13		ug/L		107	70 - 130	5	20
Methoxychlor	1.98	2.25		ug/L		114	70 - 130	5	20
Metolachlor	1.98	2.19		ug/L		110	70 - 130	5	20
Molinate	1.98	2.06		ug/L		104	70 - 130	5	20
Naphthalene	1.98	1.86		ug/L		94	70 - 130	3	20
Parathion	1.98	1.94		ug/L		98	70 - 130	5	20
Pendimethalin (Penoxaline)	1.98	2.47		ug/L		125	70 - 130	6	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: LCSD 380-162217/24-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	1.98	1.87		ug/L		94	70 - 130	4	20
Propachlor	1.98	2.00		ug/L		101	70 - 130	6	20
Pyrene	1.98	2.24		ug/L		113	70 - 130	6	20
Simazine	1.98	1.95		ug/L		99	70 - 130	5	20
Terbacil	1.98	2.05		ug/L		103	70 - 130	5	20
Terbutylazine	1.98	2.10		ug/L		106	70 - 130	6	20
Thiobencarb	1.98	2.10		ug/L		106	70 - 130	5	20
trans-Nonachlor	1.98	2.47		ug/L		125	70 - 130	4	20
Trifluralin	1.98	2.38		ug/L		120	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	117		70 - 130

Lab Sample ID: MRL 380-162217/22-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0995	0.107		ug/L		107	50 - 150
2,4'-DDD	0.0995	0.0938	J	ug/L		94	50 - 150
2,4'-DDE	0.0995	0.0989	J	ug/L		99	50 - 150
2,4'-DDT	0.0995	0.122		ug/L		123	50 - 150
2,4-Dinitrotoluene	0.0995	0.129		ug/L		129	50 - 150
2,6-Dinitrotoluene	0.0995	0.128		ug/L		129	50 - 150
2-Methylnaphthalene	0.0995	0.101		ug/L		101	50 - 150
4,4'-DDD	0.0995	0.109		ug/L		110	50 - 150
4,4'-DDE	0.0995	0.0991	J	ug/L		100	50 - 150
4,4'-DDT	0.0995	0.125		ug/L		125	50 - 150
Acenaphthene	0.0995	0.0918	J	ug/L		92	50 - 150
Acenaphthylene	0.0995	0.0934	J	ug/L		94	50 - 150
Acetochlor	0.0995	0.105		ug/L		106	50 - 150
Alachlor	0.0498	0.0532		ug/L		107	50 - 150
alpha-BHC	0.0995	0.0930	J	ug/L		93	50 - 150
alpha-Chlordane	0.0249	0.0296	J	ug/L		119	50 - 150
Anthracene	0.0199	0.0227		ug/L		114	50 - 150
Atrazine	0.0498	0.0587		ug/L		118	50 - 150
Benz(a)anthracene	0.0498	0.0557		ug/L		112	50 - 150
Benzo[a]pyrene	0.0199	0.0273		ug/L		137	50 - 150
Benzo[b]fluoranthene	0.0199	0.0257		ug/L		129	50 - 150
Benzo[g,h,i]perylene	0.0498	0.0570		ug/L		115	50 - 150
Benzo[k]fluoranthene	0.0199	0.0230		ug/L		115	50 - 150
beta-BHC	0.0995	0.100		ug/L		101	50 - 150
Bis(2-ethylhexyl) phthalate	0.597	0.593	J	ug/L		99	50 - 150
Bromacil	0.0995	0.141		ug/L		141	50 - 150
Butachlor	0.0498	0.0628		ug/L		126	50 - 150
Butylbenzylphthalate	0.498	0.521		ug/L		105	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MRL 380-162217/22-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzilate	0.0995	0.109		ug/L		110	50 - 150
Chloroneb	0.0995	0.102		ug/L		103	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0995	0.0922	J	ug/L		93	50 - 150
Chlorpyrifos	0.0498	0.0497	J	ug/L		100	50 - 150
Chrysene	0.0199	0.0206		ug/L		103	50 - 150
delta-BHC	0.0995	0.0910	J	ug/L		91	50 - 150
Di(2-ethylhexyl)adipate	0.597	0.620		ug/L		104	50 - 150
Dibenz(a,h)anthracene	0.0498	0.0609		ug/L		122	50 - 150
Diclorvos (DDVP)	0.0498	0.0588		ug/L		118	50 - 150
Dieldrin	0.00995	0.0137		ug/L		138	50 - 150
Diethylphthalate	0.498	0.513		ug/L		103	50 - 150
Dimethylphthalate	0.498	0.501		ug/L		101	50 - 150
Di-n-butyl phthalate	0.498	0.954	J	ug/L		192	49 - 243
Di-n-octyl phthalate	0.0995	0.114		ug/L		114	50 - 150
Endosulfan I (Alpha)	0.0995	0.0863	J	ug/L		87	50 - 150
Endosulfan II (Beta)	0.0995	0.100		ug/L		101	50 - 150
Endosulfan sulfate	0.0995	0.122		ug/L		123	50 - 150
Endrin	0.00995	0.0132		ug/L		132	50 - 150
Endrin aldehyde	0.0995	0.126		ug/L		127	50 - 150
EPTC	0.0995	0.0946	J	ug/L		95	50 - 150
Fluoranthene	0.0995	0.0989	J	ug/L		99	50 - 150
Fluorene	0.0498	<0.050		ug/L		96	50 - 150
gamma-Chlordane	0.0249	0.0271	J	ug/L		109	50 - 150
Heptachlor	0.00995	0.0106		ug/L		107	50 - 150
Heptachlor epoxide (isomer B)	0.00995	0.0117		ug/L		117	50 - 150
Hexachlorobenzene	0.0498	0.0509		ug/L		102	50 - 150
Hexachlorocyclopentadiene	0.0498	0.0462	J	ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	0.0498	0.0649		ug/L		130	50 - 150
Isophorone	0.0995	0.123		ug/L		124	50 - 150
Lindane	0.00995	0.0103		ug/L		103	50 - 150
Malathion	0.0995	0.120		ug/L		121	50 - 150
Methoxychlor	0.0498	0.0641		ug/L		129	50 - 150
Metolachlor	0.0498	0.0593		ug/L		119	50 - 150
Molinate	0.0995	0.0996	J	ug/L		100	50 - 150
Naphthalene	0.0995	0.0912	J	ug/L		92	50 - 150
Parathion	0.0995	0.104		ug/L		105	50 - 150
Pendimethalin (Penoxaline)	0.0995	0.141		ug/L		142	50 - 150
Phenanthrene	0.0398	0.0403		ug/L		101	50 - 150
Propachlor	0.0498	0.0535		ug/L		108	50 - 150
Pyrene	0.0498	0.0507		ug/L		102	50 - 150
Simazine	0.0498	0.0620		ug/L		125	50 - 150
Terbacil	0.0995	0.123		ug/L		124	50 - 150
Terbutylazine	0.0995	0.111		ug/L		112	50 - 150
Thiobencarb	0.0995	0.0985	J	ug/L		99	50 - 150
trans-Nonachlor	0.0249	0.0317	J	ug/L		127	50 - 150
Trifluralin	0.0995	0.132		ug/L		133	50 - 150

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MRL 380-162217/22-A

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: 380-159057-Y-1-A MS

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.96	1.87		ug/L		95	70 - 130
2,4'-DDD	<0.097		1.96	2.22		ug/L		114	70 - 130
2,4'-DDE	<0.097		1.96	2.02		ug/L		103	70 - 130
2,4'-DDT	<0.097		1.96	2.03		ug/L		104	70 - 130
2,4-Dinitrotoluene	<0.097		1.96	2.24		ug/L		114	70 - 130
2,6-Dinitrotoluene	<0.097		1.96	1.91		ug/L		98	70 - 130
2-Methylnaphthalene	<0.097		1.96	1.92		ug/L		98	70 - 130
4,4'-DDD	<0.097		1.96	2.19		ug/L		112	70 - 130
4,4'-DDE	<0.097		1.96	2.18		ug/L		112	70 - 130
4,4'-DDT	<0.097		1.96	1.96		ug/L		100	70 - 130
Acenaphthene	<0.097		1.96	1.86		ug/L		95	70 - 130
Acenaphthylene	<0.097		1.96	2.05		ug/L		105	70 - 130
Acetochlor	<0.097		1.96	2.07		ug/L		106	70 - 130
Alachlor	<0.048		1.96	2.02		ug/L		103	70 - 130
alpha-BHC	<0.097		1.96	1.90		ug/L		97	70 - 130
alpha-Chlordane	<0.048		1.96	2.33		ug/L		119	70 - 130
Anthracene	<0.019		1.96	1.96		ug/L		100	70 - 130
Atrazine	<0.048		1.96	2.14		ug/L		110	70 - 130
Benz(a)anthracene	<0.048		1.96	2.06		ug/L		105	70 - 130
Benzo[a]pyrene	<0.019		1.96	2.19		ug/L		112	70 - 130
Benzo[b]fluoranthene	<0.019		1.96	2.10		ug/L		107	70 - 130
Benzo[g,h,i]perylene	<0.048		1.96	1.84		ug/L		94	70 - 130
Benzo[k]fluoranthene	<0.019		1.96	2.11		ug/L		108	70 - 130
beta-BHC	<0.097		1.96	1.93		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.96	1.63		ug/L		83	70 - 130
Bromacil	<0.097		1.96	2.04		ug/L		104	70 - 130
Butachlor	<0.048		1.96	2.03		ug/L		104	70 - 130
Butylbenzylphthalate	<0.48		1.96	1.97		ug/L		101	70 - 130
Chlorobenzilate	<0.097		1.96	1.85		ug/L		94	70 - 130
Chloroneb	<0.097		1.96	1.91		ug/L		98	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	2.21		ug/L		113	70 - 130
Chlorpyrifos	<0.048		1.96	2.13		ug/L		109	70 - 130
Chrysene	<0.019		1.96	1.99		ug/L		102	70 - 130
delta-BHC	<0.097		1.96	1.80		ug/L		92	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.96	1.80		ug/L		92	70 - 130
Dibenz(a,h)anthracene	<0.048		1.96	1.91		ug/L		98	70 - 130
Diclorvos (DDVP)	<0.048		1.96	1.99		ug/L		102	70 - 130
Dieldrin	<0.0097		1.96	1.99		ug/L		102	70 - 130
Diethylphthalate	<0.48		1.96	2.03		ug/L		104	70 - 130

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: 380-159057-Y-1-A MS

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethylphthalate	<0.48		1.96	2.02		ug/L		103	70 - 130
Di-n-butyl phthalate	<0.97		3.91	4.55		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.097		1.96	1.72		ug/L		88	70 - 130
Endosulfan I (Alpha)	<0.097		1.96	1.87		ug/L		95	70 - 130
Endosulfan II (Beta)	<0.097		1.96	1.91		ug/L		98	70 - 130
Endosulfan sulfate	<0.097		1.96	1.94		ug/L		99	70 - 130
Endrin	<0.0097		1.96	2.25		ug/L		115	70 - 130
Endrin aldehyde	<0.097		1.96	2.29		ug/L		117	60 - 130
EPTC	<0.097		1.96	1.99		ug/L		101	70 - 130
Fluoranthene	<0.097		1.96	2.13		ug/L		109	70 - 130
Fluorene	<0.048		1.96	2.02		ug/L		103	70 - 130
gamma-Chlordane	<0.048		1.96	2.30		ug/L		117	70 - 130
Heptachlor	<0.0097		1.96	2.29		ug/L		117	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.96	2.25		ug/L		115	70 - 130
Hexachlorobenzene	<0.048		1.96	2.11		ug/L		108	70 - 130
Hexachlorocyclopentadiene	<0.048		1.96	2.41		ug/L		123	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.96	2.15		ug/L		110	70 - 130
Isophorone	<0.097		1.96	2.07		ug/L		106	70 - 130
Lindane	<0.0097		1.96	2.04		ug/L		104	70 - 130
Malathion	<0.097		1.96	2.07		ug/L		106	70 - 130
Methoxychlor	<0.048		1.96	2.23		ug/L		114	70 - 130
Metolachlor	<0.048		1.96	2.13		ug/L		109	70 - 130
Molinate	<0.097		1.96	2.03		ug/L		104	70 - 130
Naphthalene	<0.097		1.96	1.86		ug/L		95	70 - 130
Parathion	<0.097		1.96	1.90		ug/L		97	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.96	2.40		ug/L		123	70 - 130
Phenanthrene	<0.039		1.96	1.86		ug/L		95	70 - 130
Propachlor	<0.048		1.96	1.95		ug/L		100	70 - 130
Pyrene	<0.048		1.96	2.17		ug/L		111	70 - 130
Simazine	<0.048		1.96	1.95		ug/L		100	70 - 130
Terbacil	<0.097		1.96	2.04		ug/L		104	70 - 130
Terbutylazine	<0.097		1.96	2.09		ug/L		107	70 - 130
Thiobencarb	<0.097		1.96	2.05		ug/L		105	70 - 130
trans-Nonachlor	<0.048		1.96	2.41		ug/L		123	70 - 130
Trifluralin	<0.097		1.96	2.29		ug/L		117	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	92		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	114		70 - 130

Lab Sample ID: 380-159447-D-1-A DU

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 162217

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
2,4'-DDD	<0.098		<0.098		ug/L		NC	20

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QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: 380-159447-D-1-A DU
Matrix: Water
Analysis Batch: 162297

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: 380-159447-D-1-A DU

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 162217

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

Surrogate	%Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	111		70 - 130

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

Lab Sample ID: MB 570-593529/1-A

Matrix: Water

Analysis Batch: 600481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 593529

Tentatively Identified Compound	Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/07/25 05:12	07/22/25 14:04	1

Surrogate	%Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	54		33 - 139	07/07/25 05:12	07/22/25 14:04	1
2-Fluorobiphenyl (Surr)	62		33 - 126	07/07/25 05:12	07/22/25 14:04	1
2-Fluorophenol (Surr)	33		12 - 120	07/07/25 05:12	07/22/25 14:04	1
Nitrobenzene-d5 (Surr)	66		36 - 120	07/07/25 05:12	07/22/25 14:04	1
Phenol-d6 (Surr)	21		10 - 120	07/07/25 05:12	07/22/25 14:04	1
p-Terphenyl-d14 (Surr)	63		47 - 131	07/07/25 05:12	07/22/25 14:04	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MB 570-596307/1-A

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 596307

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
2-Methylnaphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Acenaphthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Acenaphthylene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Benzo[a]anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Benzo[a]pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Chrysene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Fluoranthene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Fluorene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Naphthalene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Phenanthrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1
Pyrene	<0.20		0.20	ug/L		07/12/25 10:28	07/22/25 10:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		28 - 127	07/12/25 10:28	07/22/25 10:54	1
2-Fluorobiphenyl (Surr)	72		31 - 120	07/12/25 10:28	07/22/25 10:54	1
2-Fluorophenol (Surr)	41		17 - 120	07/12/25 10:28	07/22/25 10:54	1
Nitrobenzene-d5 (Surr)	73		27 - 120	07/12/25 10:28	07/22/25 10:54	1
Phenol-d6 (Surr)	24		10 - 120	07/12/25 10:28	07/22/25 10:54	1
p-Terphenyl-d14 (Surr)	92		45 - 120	07/12/25 10:28	07/22/25 10:54	1

Lab Sample ID: LCS 570-596307/2-A

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	16.2		ug/L		81	47 - 120
2-Methylnaphthalene	20.0	15.7		ug/L		78	43 - 120
Acenaphthene	20.0	18.3		ug/L		91	60 - 132
Acenaphthylene	20.0	18.4		ug/L		92	54 - 126
Anthracene	20.0	17.9		ug/L		90	43 - 120
Benzo[a]anthracene	20.0	18.2		ug/L		91	42 - 133
Benzo[a]pyrene	20.0	17.4		ug/L		87	32 - 148
Benzo[b]fluoranthene	20.0	17.9		ug/L		89	42 - 140
Benzo[g,h,i]perylene	20.0	19.2		ug/L		96	1 - 195
Benzo[k]fluoranthene	20.0	18.0		ug/L		90	25 - 146
Chrysene	20.0	18.7		ug/L		94	44 - 140
Dibenz(a,h)anthracene	20.0	19.4		ug/L		97	1 - 200
Fluoranthene	20.0	19.0		ug/L		95	43 - 121
Fluorene	20.0	19.0		ug/L		95	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	18.2		ug/L		91	1 - 151
Naphthalene	20.0	15.8		ug/L		79	36 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: LCS 570-596307/2-A

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	18.7		ug/L		94	65 - 120
Pyrene	20.0	19.3		ug/L		97	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	93		28 - 127
2-Fluorobiphenyl (Surr)	91		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	79		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	92		45 - 120

Lab Sample ID: LCSD 570-596307/3-A

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	18.2		ug/L		91	47 - 120	12	20
2-Methylnaphthalene	20.0	17.8		ug/L		89	43 - 120	13	20
Acenaphthene	20.0	18.3		ug/L		92	60 - 132	0	29
Acenaphthylene	20.0	16.5		ug/L		83	54 - 126	11	45
Anthracene	20.0	16.7		ug/L		84	43 - 120	7	40
Benzo[a]anthracene	20.0	17.5		ug/L		87	42 - 133	4	32
Benzo[a]pyrene	20.0	15.2		ug/L		76	32 - 148	13	43
Benzo[b]fluoranthene	20.0	17.4		ug/L		87	42 - 140	3	43
Benzo[g,h,i]perylene	20.0	23.1		ug/L		116	1 - 195	19	61
Benzo[k]fluoranthene	20.0	17.3		ug/L		86	25 - 146	4	38
Chrysene	20.0	18.0		ug/L		90	44 - 140	4	53
Dibenz(a,h)anthracene	20.0	23.5		ug/L		118	1 - 200	20	75
Fluoranthene	20.0	18.1		ug/L		91	43 - 121	5	40
Fluorene	20.0	18.4		ug/L		92	70 - 120	3	23
Indeno[1,2,3-cd]pyrene	20.0	22.1		ug/L		110	1 - 151	19	60
Naphthalene	20.0	18.1		ug/L		90	36 - 120	13	39
Phenanthrene	20.0	18.3		ug/L		92	65 - 120	2	24
Pyrene	20.0	18.4		ug/L		92	70 - 120	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	93		28 - 127
2-Fluorobiphenyl (Surr)	89		31 - 120
2-Fluorophenol (Surr)	56		17 - 120
Nitrobenzene-d5 (Surr)	88		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	88		45 - 120

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MB 570-599688/10

Matrix: Water

Analysis Batch: 599688

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			07/20/25 14:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		38 - 134				07/20/25 14:56	1

Lab Sample ID: LCS 570-599688/1008

Matrix: Water

Analysis Batch: 599688

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	379		ug/L		95	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		38 - 134				

Lab Sample ID: LCSD 570-599688/9

Matrix: Water

Analysis Batch: 599688

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	389		ug/L		97	78 - 120	3	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	89		38 - 134						

Lab Sample ID: MRL 570-599688/11

Matrix: Water

Analysis Batch: 599688

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	8.45	J	ug/L		85	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	82		38 - 134				

Lab Sample ID: 380-159486-C-1 MS

Matrix: Water

Analysis Batch: 599688

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	379		ug/L		95	68 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		38 - 134						

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: 380-159486-C-1 MSD

Matrix: Water

Analysis Batch: 599688

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	380		ug/L		95	68 - 122	0	18
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	100		38 - 134								

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

Lab Sample ID: MB 570-596824/1-A

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 596824

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21	1
C8-C18	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21	1
Surrogate	%Recovery	MB Qualifier	MB Limits					Dil Fac
n-Octacosane (Surr)	92		60 - 130					1
						Prepared	Analyzed	Dil Fac
						07/14/25 10:40	07/19/25 01:21	1

Lab Sample ID: LCS 570-596824/2-A

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD
C10-C28	1600	1520		ug/L		95	56 - 127	
Surrogate	%Recovery	LCS Qualifier	LCS Limits					
n-Octacosane (Surr)	105		60 - 130					

Lab Sample ID: LCSD 570-596824/3-A

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 596824

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD
C10-C28	1600	1470		ug/L		92	56 - 127	4
Surrogate	%Recovery	LCSD Qualifier	LCSD Limits					
n-Octacosane (Surr)	101		60 - 130					

Lab Sample ID: MRL 570-596824/4-A

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD
C10-C28	0.0200	0.0225	J	mg/L		113	50 - 150	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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

Lab Sample ID: MRL 570-596824/4-A

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	94		60 - 130

Lab Sample ID: 380-159486-B-1-B MS

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 596824

	Sample	Sample	Spike	MS	MS					%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
C10-C28	48		1660	1740		ug/L		102	70 - 130		
Surrogate	%Recovery	Qualifier	Limits								
n-Octacosane (Surr)	111		60 - 130								

Lab Sample ID: 380-159486-B-1-C MSD

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 596824

	Sample	Sample	Spike	MSD	MSD					%Rec	RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
C10-C28	48		1670	1700		ug/L		99	70 - 130	3	20	
Surrogate	%Recovery	Qualifier	Limits									
n-Octacosane (Surr)	109		60 - 130									

QC Association Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

GC/MS Semi VOA

Prep Batch: 162217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	525.2	
MB 380-162217/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-162217/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-162217/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-162217/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-159057-Y-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-159447-D-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 162297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	162217
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	525.2	162217
MB 380-162217/21-A	Method Blank	Total/NA	Water	525.2	162217
LCS 380-162217/23-A	Lab Control Sample	Total/NA	Water	525.2	162217
LCSD 380-162217/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	162217
MRL 380-162217/22-A	Lab Control Sample	Total/NA	Water	525.2	162217
380-159057-Y-1-A MS	Matrix Spike	Total/NA	Water	525.2	162217
380-159447-D-1-A DU	Duplicate	Total/NA	Water	525.2	162217

Prep Batch: 593529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1	

Prep Batch: 596307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1	
MB 570-596307/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-596307/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-596307/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 600411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1 SIM	596307
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1 SIM	596307
MB 570-596307/1-A	Method Blank	Total/NA	Water	625.1 SIM	596307
LCS 570-596307/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	596307
LCSD 570-596307/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	596307

Analysis Batch: 600481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	596307
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1	596307
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1	593529

GC VOA

Analysis Batch: 599688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

GC VOA (Continued)

Analysis Batch: 599688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-2	TB: Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	8015B GRO LL	
380-159504-4	TB: Ka'amilo Wells Pump 2	Total/NA	Water	8015B GRO LL	
MB 570-599688/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-599688/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-599688/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-599688/11	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-159486-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-159486-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 596824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	3510C	
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	3510C	
MB 570-596824/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-596824/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-596824/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-596824/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-159486-B-1-B MS	Matrix Spike	Total/NA	Water	3510C	
380-159486-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 599363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159504-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B	596824
380-159504-3	Ka'amilo Wells Pump 2	Total/NA	Water	8015B	596824
MB 570-596824/1-A	Method Blank	Total/NA	Water	8015B	596824
LCS 570-596824/2-A	Lab Control Sample	Total/NA	Water	8015B	596824
LCSD 570-596824/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	596824
MRL 570-596824/4-A	Lab Control Sample	Total/NA	Water	8015B	596824
380-159486-B-1-B MS	Matrix Spike	Total/NA	Water	8015B	596824
380-159486-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	596824

Lab Chronicle

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-159504-1

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			162217	OTM3	EA POM	07/11/25 07:36
Total/NA	Analysis	525.2		1	162297	Q8LA	EA POM	07/11/25 16:27
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1		1	600481	CG	EET CAL 4	07/22/25 16:06
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1 SIM		1	600411	PQS1	EET CAL 4	07/22/25 17:07
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 18:47
Total/NA	Prep	3510C			596824	TVD6	EET CAL 4	07/14/25 10:41
Total/NA	Analysis	8015B		1	599363	NR	EET CAL 4	07/19/25 04:59

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

Lab Sample ID: 380-159504-2

Date Collected: 07/07/25 11:39

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 23:32

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-3

Date Collected: 07/07/25 12:21

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			162217	OTM3	EA POM	07/11/25 07:36
Total/NA	Analysis	525.2		1	162297	Q8LA	EA POM	07/11/25 16:48
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1		1	600481	CG	EET CAL 4	07/22/25 16:30
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1 SIM		1	600411	PQS1	EET CAL 4	07/22/25 17:29
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 19:09
Total/NA	Prep	3510C			596824	TVD6	EET CAL 4	07/14/25 10:41
Total/NA	Analysis	8015B		1	599363	NR	EET CAL 4	07/19/25 05:21

Client Sample ID: TB: Ka'amilo Wells Pump 2

Lab Sample ID: 380-159504-4

Date Collected: 07/07/25 12:21

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 23:53

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

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Laboratory: Eurofins Calscience (Continued)

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
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	10-11-25

Method Summary

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

Job ID: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

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: 380-159504-1
SDG: Weekly: Ka'amilo Wells Pump 1/Pump 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-159504-1	Ka'amilo Wells Pump 1	Water	07/07/25 11:39	07/09/25 09:30
380-159504-2	TB: Ka'amilo Wells Pump 1	Water	07/07/25 11:39	07/09/25 09:30
380-159504-3	Ka'amilo Wells Pump 2	Water	07/07/25 12:21	07/09/25 09:30
380-159504-4	TB: Ka'amilo Wells Pump 2	Water	07/07/25 12:21	07/09/25 09:30

Chain of Custody Record



Environment Testing

Client Information		Sampler bailey		Lab PM: Arada, Rachelle		Carrier Tracking No(s): 380-28005-2757 1	
Client Contact Mr. Kirk Iwamoto		Phone: +1 808 748 5840		E-Mail: Rachelle.Arada@et.eurofins.com		Page: Page 1 of 1	
Company City & County of Honolulu		PWSID:		Analysis Requested		Job #:	
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested:		633 - All Analytes		Preservation Codes: R - NaThioSO4 RA - NaThioHCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate	
City: Honolulu		TAT Requested (days):		637.1, DW, PREC - 637.1 Full List		Other:	
State, Zip: HI, 96843		Compliance Project: ☐ Yes ☒ No		637.2, PREC - (MOD) 625plus Plus Tics		Total Number of Containers	
Phone: 808-748-5840 (Tel)		PO #: C20525101 exp 05312023		601B, DRO, LL, CS - HNL Ranges: C10-C24/C24-C36/C8-C18		Special Instructions/Note:	
Email: kiwamoto@hbws.org		WO #:		601B, GRO, LL - (MOD) GRO			
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111		625.1, 625.1, BIM			
Site: Hawaii		SSOW#:		Perform MS/MSD (Yes or No)			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Weather, Sealed, Open, Other)	Field Filled Sample (Yes or No)	Field Filled Sample (Yes or No)
Ka'amilo Wells Pump 1	7-Jul-2025	1139	G	Water	Water	☒	☒
Ka'amilo Wells Pump 1 (Matrix Spike)				Water	Water		
Ka'amilo Wells Pump 1 (Matrix Spike Duplicate)				Water	Water		
TB: Ka'amilo Wells Pump 1	7-Jul-2025	1139		Water	Water		
Ka'amilo Wells Pump 2	7-Jul-2025	1221	G	Water	Water	☒	☒
Ka'amilo Wells Pump 2 (Matrix Spike)				Water	Water		
Ka'amilo Wells Pump 2 (Matrix Spike Duplicate)				Water	Water		
TB: Ka'amilo Wells Pump 2	7-Jul-2025	1221		Water	Water		
							380-159504 COC
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months	
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:		FEB 5 10 8826 1247 1927	
Empty Kit Relinquished by		Date:		Time:		Method of Shipment: 2 8826 1247 1938	
Date/Time: 08/09/2025		Company: HAWAII		Received by: [Signature]		Date/Time: 07/09/25 09:30	
Date/Time:		Company:		Received by:		Date/Time:	
Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by							
Custody Seals Intact: ☐ Yes ☒ No		Custody Seal No.					

941 Corporate Center Drive
Pomona, CA 91768-2842
Phone: 626-386-1100

Chain of Custody Record



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Loc: 380
159504

Client Information (Sub Contract Lab)						Sampler: N/A		Lab PM: Lopez, Maria		Carrier Tracking No(s): N/A		COC No: 380-229345.1	
Client Contact:						Phone: N/A		E-Mail: Maria.Lopez@et.eurofinsus.com		State of Origin: Hawaii		Page: Page 1 of 1	
Shipping/Receiving													
Company: Eurofins Environment Testing Southwest,						Accreditations Required (See note): State - Hawaii						Job #: 380-159504-1	
Address: 2841 Dow Avenue, Suite 100, City: Tustin State, Zip: CA, 92780						Due Date Requested: 7/22/2025 TAT Requested (days): N/A						Analysis Requested	
Phone: 714-895-5494(Tel)						PO #: N/A						Preservation Codes:	
Email: N/A						WO #: N/A						Other: N/A	
Project Name: RED-HILL						Project #: 38001111							
Site: Honolulu BWS Sites						SSOW#: N/A							
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sediment, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO_LL_CS3510C_LLHL Ranges: C10-C24/C24-C36/C8-C16	8015B_GRO_LLJ603MC(MOD) GRO	625.1_SIM/625_Prep(MOD) Extended PAH List	625.1/625_Prep(MOD) Tentatively Identified Compounds (Hold)	Total Number of containers	Special Instructions/Note:
Ka'amilo Wells Pump 1 (380-159504-1)		7/7/25	11:39 Hawaiian	G	Water	X	X	X	X			6	MRLs are needed. Confirm any hits >RL.
TB: Ka'amilo Wells Pump 1 (380-159504-2)		7/7/25	11:39 Hawaiian	G	Water			X				2	MRLs are needed.
Ka'amilo Wells Pump 2 (380-159504-3)		7/7/25	12:21 Hawaiian	G	Water	X	X	X	X			7	MRLs are needed. Confirm any hits >RL.
TB: Ka'amilo Wells Pump 2 (380-159504-4)		7/7/25	12:21 Hawaiian	G	Water			X				2	MRLs are needed.
						 380-159504 Chain of Custody							
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.													
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							
Unconfirmed						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months							
Deliverable Requested: I, II, III, IV, Other (specify)						Primary Deliverable Rank: 2						Special Instructions/QC Requirements:	
Empty Kit Relinquished by:						Date:		Time:		Method of Shipment:			
Relinquished by: [Signature]						Date/Time: 7/10/25 1350		Company: EEA		Received by: [Signature]		Date/Time: 7/10/25 1350 L.C.	
Relinquished by:						Date/Time:		Company:		Received by:		Date/Time: Company:	
Relinquished by:						Date/Time:		Company:		Received by:		Date/Time: Company:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:							
						1.2/1.5 3.2/3.5 SC11							

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-159504-1

SDG Number: Weekly: Ka'amilo Wells Pump 1/Pump 2

Login Number: 159504

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.	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.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
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: 380-159504-1

SDG Number: Weekly: Ka'amilo Wells Pump 1/Pump 2

Login Number: 159504

List Number: 2

Creator: Mills, Mary

List Source: Eurofins Calscience

List Creation: 07/10/25 09:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	1.5, 2.3, 3.5, 2.8
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	