

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Ka'amilo Wells Pump1/Pump 2

JOB NUMBER

380-154994-1

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: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Qualifiers

GC/MS Semi VOA

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

GC/MS Semi VOA TICs

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 380-154994-1

Job ID: 380-154994-1

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Job Narrative 380-154994-1

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 6/11/2025 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 2.5°C and 3.3°C.

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

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

Detection Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.064		0.0098	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.012		0.0098	ug/L	1		525.2	Total/NA

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

Lab Sample ID: 380-154994-2

No Detections.

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.056		0.0099	ug/L	1		525.2	Total/NA

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

Lab Sample ID: 380-154994-4

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 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		06/13/25 13:19	06/15/25 19:38	1
2,4'-DDD	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
2,4'-DDE	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
2,4'-DDT	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
2-Methylnaphthalene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
4,4'-DDD	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
4,4'-DDE	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
4,4'-DDT	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Acenaphthene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Acenaphthylene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Acetochlor	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Alachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
alpha-BHC	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
alpha-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Anthracene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:38	1
Atrazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Benz(a)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Benzo[a]pyrene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:38	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:38	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:38	1
beta-BHC	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 19:38	1
Bromacil	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Butachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Butylbenzylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:38	1
Chlorobenzilate	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Chloroneb	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Chlorpyrifos	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Chrysene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:38	1
delta-BHC	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 19:38	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Dieldrin	0.064		0.0098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Diethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:38	1
Dimethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:38	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		06/13/25 13:19	06/15/25 19:38	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Endosulfan sulfate	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Endrin	<0.0098		0.0098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Endrin aldehyde	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
EPTC	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Fluoranthene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1

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Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 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		06/13/25 13:19	06/15/25 19:38	1
gamma-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Heptachlor	<0.0098		0.0098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Heptachlor epoxide (isomer B)	0.012		0.0098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Hexachlorobenzene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Isophorone	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Lindane	<0.0098		0.0098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Malathion	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Methoxychlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Metolachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Molinate	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Naphthalene	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Parathion	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Phenanthrene	<0.039		0.039	ug/L		06/13/25 13:19	06/15/25 19:38	1
Propachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Simazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Terbacil	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Terbutylazine	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Thiobencarb	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		06/13/25 13:19	06/15/25 19:38	1
trans-Nonachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:38	1
Trifluralin	<0.098		0.098	ug/L		06/13/25 13:19	06/15/25 19:38	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	06/13/25 13:19	06/15/25 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	06/13/25 13:19	06/15/25 19:38	1
Perylene-d12	88		70 - 130	06/13/25 13:19	06/15/25 19:38	1
Triphenylphosphate	101		70 - 130	06/13/25 13:19	06/15/25 19:38	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		06/12/25 16:14	06/20/25 14:21	1
2-Methylnaphthalene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Acenaphthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Acenaphthylene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Benzo[a]anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Benzo[a]pyrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Chrysene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 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	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Naphthalene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Phenanthrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1
Pyrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	109		28 - 127	06/12/25 16:14	06/20/25 14:21	1
2-Fluorobiphenyl (Surr)	91		31 - 120	06/12/25 16:14	06/20/25 14:21	1
2-Fluorophenol (Surr)	47		17 - 120	06/12/25 16:14	06/20/25 14:21	1
Nitrobenzene-d5 (Surr)	87		27 - 120	06/12/25 16:14	06/20/25 14:21	1
Phenol-d6 (Surr)	29		10 - 120	06/12/25 16:14	06/20/25 14:21	1
p-Terphenyl-d14 (Surr)	97		45 - 120	06/12/25 16:14	06/20/25 14:21	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	06/12/25 16:14	06/24/25 15:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		33 - 139	06/12/25 16:14	06/24/25 15:25	1
2-Fluorobiphenyl (Surr)	83		33 - 126	06/12/25 16:14	06/24/25 15:25	1
2-Fluorophenol (Surr)	54		12 - 120	06/12/25 16:14	06/24/25 15:25	1
Nitrobenzene-d5 (Surr)	90		36 - 120	06/12/25 16:14	06/24/25 15:25	1
Phenol-d6 (Surr)	26		10 - 120	06/12/25 16:14	06/24/25 15:25	1
p-Terphenyl-d14 (Surr)	82		47 - 131	06/12/25 16:14	06/24/25 15:25	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			06/21/25 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		38 - 134		06/21/25 19:56	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)	<25		25	ug/L		06/16/25 09:11	06/17/25 16:12	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		06/16/25 09:11	06/17/25 16:12	1
C8-C18	<25		25	ug/L		06/16/25 09:11	06/17/25 16:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	111		60 - 130	06/16/25 09:11	06/17/25 16:12	1

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

Lab Sample ID: 380-154994-2

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 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			06/21/25 15:26	1

Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154994-2

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		38 - 134		06/21/25 15:26	1

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2,4'-DDD	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2,4'-DDE	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2,4'-DDT	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
2-Methylnaphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
4,4'-DDD	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
4,4'-DDE	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
4,4'-DDT	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Acenaphthene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Acenaphthylene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Acetochlor	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Alachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
alpha-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
alpha-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Anthracene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:58	1
Atrazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Benz(a)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Benzo[a]pyrene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:58	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:58	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:58	1
beta-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 19:58	1
Bromacil	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Butachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Butylbenzylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:58	1
Chlorobenzilate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Chloroneb	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Chlorpyrifos	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Chrysene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 19:58	1
delta-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 19:58	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Dieldrin	0.056		0.0099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Diethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:58	1
Dimethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 19:58	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		06/13/25 13:19	06/15/25 19:58	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1

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Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 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)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Endosulfan sulfate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Endrin	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Endrin aldehyde	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
EPTC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Fluoranthene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Fluorene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
gamma-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Heptachlor	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Hexachlorobenzene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Isophorone	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Lindane	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Malathion	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Methoxychlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Metolachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Molinate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Naphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Parathion	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Phenanthrene	<0.040		0.040	ug/L		06/13/25 13:19	06/15/25 19:58	1
Propachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Simazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Terbacil	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Terbutylazine	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Thiobencarb	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		06/13/25 13:19	06/15/25 19:58	1
trans-Nonachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 19:58	1
Trifluralin	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 19:58	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	06/13/25 13:19	06/15/25 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	06/13/25 13:19	06/15/25 19:58	1
Perylene-d12	81		70 - 130	06/13/25 13:19	06/15/25 19:58	1
Triphenylphosphate	100		70 - 130	06/13/25 13:19	06/15/25 19:58	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		06/12/25 16:14	06/20/25 14:44	1
2-Methylnaphthalene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Acenaphthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Acenaphthylene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Benzo[a]anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1

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Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 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		06/12/25 16:14	06/20/25 14:44	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Chrysene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Fluoranthene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Fluorene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Naphthalene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Phenanthrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1
Pyrene	<0.19		0.19	ug/L		06/12/25 16:14	06/20/25 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		28 - 127	06/12/25 16:14	06/20/25 14:44	1
2-Fluorobiphenyl (Surr)	73		31 - 120	06/12/25 16:14	06/20/25 14:44	1
2-Fluorophenol (Surr)	40		17 - 120	06/12/25 16:14	06/20/25 14:44	1
Nitrobenzene-d5 (Surr)	73		27 - 120	06/12/25 16:14	06/20/25 14:44	1
Phenol-d6 (Surr)	25		10 - 120	06/12/25 16:14	06/20/25 14:44	1
p-Terphenyl-d14 (Surr)	93		45 - 120	06/12/25 16:14	06/20/25 14:44	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	06/12/25 16:14	06/24/25 15:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	66		33 - 139	06/12/25 16:14	06/24/25 15:48	1
2-Fluorobiphenyl (Surr)	69		33 - 126	06/12/25 16:14	06/24/25 15:48	1
2-Fluorophenol (Surr)	44		12 - 120	06/12/25 16:14	06/24/25 15:48	1
Nitrobenzene-d5 (Surr)	76		36 - 120	06/12/25 16:14	06/24/25 15:48	1
Phenol-d6 (Surr)	25		10 - 120	06/12/25 16:14	06/24/25 15:48	1
p-Terphenyl-d14 (Surr)	79		47 - 131	06/12/25 16:14	06/24/25 15:48	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			06/21/25 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		38 - 134		06/21/25 19:33	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		06/16/25 09:11	06/17/25 16:34	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		06/16/25 09:11	06/17/25 16:34	1
C8-C18	<26		26	ug/L		06/16/25 09:11	06/17/25 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	106		60 - 130	06/16/25 09:11	06/17/25 16:34	1

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Client Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154994-4

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 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			06/21/25 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		38 - 134				06/21/25 15:04	1

Action Limit Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

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)	0.012		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

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	<0.049		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	<0.0099		ug/L	2	0.0099	525.2	Total/NA
Heptachlor	<0.0099		ug/L	0.4	0.0099	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0099		ug/L	0.2	0.0099	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	<0.0099		ug/L	0.2	0.0099	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-154619-AQ-1-A MS	Matrix Spike	95	97	114
380-154705-B-1-A DU	Duplicate	97	89	97
380-154994-1	Ka'amilo Wells Pump 1	99	88	101
380-154994-3	Ka'amilo Wells Pump 2	98	81	100
LCS 380-157861/23-A	Lab Control Sample	99	95	101
MB 380-157861/21-A	Method Blank	97	88	99
MRL 380-157861/22-A	Lab Control Sample	98	93	97

Surrogate Legend

2NMX = 2-Nitro-m-xylene

PRY = Perylene-d12

TPP = Triphenylphosphate

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-154994-1	Ka'amilo Wells Pump 1	86	83	54	90	26	82
380-154994-3	Ka'amilo Wells Pump 2	66	69	44	76	25	79
MB 570-582856/1-A	Method Blank	70	68	52	76	35	72

Surrogate Legend

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

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-154969-A-2-B MS	Matrix Spike	98	83	52	68	33	91
380-154969-A-2-C MSD	Matrix Spike Duplicate	99	80	47	65	31	93
380-154994-1	Ka'amilo Wells Pump 1	109	91	47	87	29	97
380-154994-3	Ka'amilo Wells Pump 2	93	73	40	73	25	93
LCS 570-582856/2-A	Lab Control Sample	89	80	60	75	40	94
LCSD 570-582856/3-A	Lab Control Sample Dup	84	75	56	69	38	87
MB 570-582856/1-A	Method Blank	81	70	47	78	29	80

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)

Eurofins Eaton Analytical Pomona

Surrogate Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/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)
380-154969-C-2 MS	Matrix Spike	97
380-154969-C-2 MSD	Matrix Spike Duplicate	100
380-154994-1	Ka'amilo Wells Pump 1	76
380-154994-2	TB: Ka'amilo Wells Pump 1	82
380-154994-3	Ka'amilo Wells Pump 2	76
380-154994-4	TB: Ka'amilo Wells Pump 2	79
LCS 570-587470/1008	Lab Control Sample	95
LCSD 570-587470/9	Lab Control Sample Dup	90
MB 570-587470/10	Method Blank	63
MRL 570-587470/1003	Lab Control Sample	73

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)
380-154969-B-2-A MS	Matrix Spike	106
380-154969-B-2-B MSD	Matrix Spike Duplicate	104
380-154994-1	Ka'amilo Wells Pump 1	111
380-154994-3	Ka'amilo Wells Pump 2	106
LCS 570-584549/2-A	Lab Control Sample	108
LCSD 570-584549/3-A	Lab Control Sample Dup	113
MB 570-584549/1-A	Method Blank	107
MRL 570-584549/4-A	Lab Control Sample	107

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MB 380-157861/21-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 157861

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2,4'-DDD	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2,4'-DDE	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2,4'-DDT	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
2-Methylnaphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
4,4'-DDD	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
4,4'-DDE	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
4,4'-DDT	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Acenaphthene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Acenaphthylene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Acetochlor	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Alachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
alpha-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
alpha-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Anthracene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 13:53	1
Atrazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Benz(a)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Benzo[a]pyrene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 13:53	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 13:53	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 13:53	1
beta-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 13:53	1
Bromacil	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Butachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Butylbenzylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 13:53	1
Chlorobenzilate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Chloroneb	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Chlorpyrifos	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Chrysene	<0.020		0.020	ug/L		06/13/25 13:19	06/15/25 13:53	1
delta-BHC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		06/13/25 13:19	06/15/25 13:53	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Dieldrin	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Diethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 13:53	1
Dimethylphthalate	<0.49		0.49	ug/L		06/13/25 13:19	06/15/25 13:53	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		06/13/25 13:19	06/15/25 13:53	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Endosulfan sulfate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Endrin	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Endrin aldehyde	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
EPTC	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1

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QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MB 380-157861/21-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 157861

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Fluorene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
gamma-Chlordane	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Heptachlor	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Hexachlorobenzene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Isophorone	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Lindane	<0.0099		0.0099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Malathion	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Methoxychlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Metolachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Molinate	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Naphthalene	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Parathion	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Phenanthrene	<0.039		0.039	ug/L		06/13/25 13:19	06/15/25 13:53	1
Propachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Pyrene	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Simazine	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Terbacil	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Terbutylazine	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Thiobencarb	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		06/13/25 13:19	06/15/25 13:53	1
trans-Nonachlor	<0.049		0.049	ug/L		06/13/25 13:19	06/15/25 13:53	1
Trifluralin	<0.099		0.099	ug/L		06/13/25 13:19	06/15/25 13:53	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclohexasiloxane, dodecamethyl-	0.575	T J N	ug/L		3.91	540-97-6	06/13/25 13:19	06/15/25 13:53	1
9-Octadecenamide, (Z)-	0.603	T J N	ug/L		7.96	301-02-0	06/13/25 13:19	06/15/25 13:53	1
13-Docosenamide, (Z)-	1.19	T J N	ug/L		10.52	112-84-5	06/13/25 13:19	06/15/25 13:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	06/13/25 13:19	06/15/25 13:53	1
Perylene-d12	88		70 - 130	06/13/25 13:19	06/15/25 13:53	1
Triphenylphosphate	99		70 - 130	06/13/25 13:19	06/15/25 13:53	1

Lab Sample ID: LCS 380-157861/23-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.96	2.03		ug/L		103	70 - 130
2,4'-DDD	1.96	1.97		ug/L		100	70 - 130
2,4'-DDE	1.96	2.02		ug/L		103	70 - 130
2,4'-DDT	1.96	1.84		ug/L		94	70 - 130
2,4-Dinitrotoluene	1.96	1.80		ug/L		91	70 - 130

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QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: LCS 380-157861/23-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	1.96	2.04		ug/L		104	70 - 130
2-Methylnaphthalene	1.96	1.90		ug/L		97	70 - 130
4,4'-DDD	1.96	2.10		ug/L		107	70 - 130
4,4'-DDE	1.96	1.99		ug/L		101	70 - 130
4,4'-DDT	1.96	1.96		ug/L		100	70 - 130
Acenaphthene	1.96	1.96		ug/L		100	70 - 130
Acenaphthylene	1.96	1.85		ug/L		95	70 - 130
Acetochlor	1.96	2.07		ug/L		105	70 - 130
Alachlor	1.96	2.18		ug/L		111	70 - 130
alpha-BHC	1.96	2.03		ug/L		103	70 - 130
alpha-Chlordane	1.96	2.09		ug/L		106	70 - 130
Anthracene	1.96	1.77		ug/L		90	70 - 130
Atrazine	1.96	2.04		ug/L		104	70 - 130
Benz(a)anthracene	1.96	1.89		ug/L		96	70 - 130
Benzo[a]pyrene	1.96	1.84		ug/L		94	70 - 130
Benzo[b]fluoranthene	1.96	2.05		ug/L		105	70 - 130
Benzo[g,h,i]perylene	1.96	2.04		ug/L		104	70 - 130
Benzo[k]fluoranthene	1.96	1.91		ug/L		97	70 - 130
beta-BHC	1.96	2.11		ug/L		107	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	1.83		ug/L		93	70 - 130
Bromacil	1.96	1.91		ug/L		97	70 - 130
Butachlor	1.96	2.28		ug/L		116	70 - 130
Butylbenzylphthalate	1.96	2.12		ug/L		108	70 - 130
Chlorobenzilate	1.96	2.14		ug/L		109	70 - 130
Chloroneb	1.96	2.00		ug/L		102	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	2.04		ug/L		104	70 - 130
Chlorpyrifos	1.96	2.07		ug/L		105	70 - 130
Chrysene	1.96	1.97		ug/L		100	70 - 130
delta-BHC	1.96	2.12		ug/L		108	70 - 130
Di(2-ethylhexyl)adipate	1.96	1.88		ug/L		96	70 - 130
Dibenz(a,h)anthracene	1.96	1.87		ug/L		95	70 - 130
Diclorvos (DDVP)	1.96	1.96		ug/L		100	70 - 130
Dieldrin	1.96	2.02		ug/L		103	70 - 130
Diethylphthalate	1.96	2.12		ug/L		108	70 - 130
Dimethylphthalate	1.96	2.08		ug/L		106	70 - 130
Di-n-butyl phthalate	3.93	4.27		ug/L		109	70 - 130
Di-n-octyl phthalate	1.96	1.80		ug/L		91	70 - 130
Endosulfan I (Alpha)	1.96	1.91		ug/L		97	70 - 130
Endosulfan II (Beta)	1.96	2.05		ug/L		104	70 - 130
Endosulfan sulfate	1.96	2.09		ug/L		106	70 - 130
Endrin	1.96	2.09		ug/L		106	70 - 130
Endrin aldehyde	1.96	1.76		ug/L		90	60 - 130
EPTC	1.96	2.08		ug/L		106	70 - 130
Fluoranthene	1.96	2.09		ug/L		106	70 - 130
Fluorene	1.96	1.99		ug/L		102	70 - 130
gamma-Chlordane	1.96	2.12		ug/L		108	70 - 130
Heptachlor	1.96	2.15		ug/L		110	70 - 130
Heptachlor epoxide (isomer B)	1.96	2.08		ug/L		106	70 - 130
Hexachlorobenzene	1.96	1.95		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: LCS 380-157861/23-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	1.96	1.85		ug/L		94	70 - 130
Indeno[1,2,3-cd]pyrene	1.96	1.94		ug/L		99	70 - 130
Isophorone	1.96	1.98		ug/L		101	70 - 130
Lindane	1.96	2.15		ug/L		109	70 - 130
Malathion	1.96	2.09		ug/L		107	70 - 130
Methoxychlor	1.96	2.06		ug/L		105	70 - 130
Metolachlor	1.96	2.08		ug/L		106	70 - 130
Molinate	1.96	2.12		ug/L		108	70 - 130
Naphthalene	1.96	1.91		ug/L		97	70 - 130
Parathion	1.96	2.05		ug/L		105	70 - 130
Pendimethalin (Penoxaline)	1.96	1.79		ug/L		91	70 - 130
Phenanthrene	1.96	1.92		ug/L		98	70 - 130
Propachlor	1.96	2.08		ug/L		106	70 - 130
Pyrene	1.96	2.12		ug/L		108	70 - 130
Simazine	1.96	2.10		ug/L		107	70 - 130
Terbacil	1.96	2.06		ug/L		105	70 - 130
Terbutylazine	1.96	2.15		ug/L		110	70 - 130
Thiobencarb	1.96	2.23		ug/L		113	70 - 130
trans-Nonachlor	1.96	2.09		ug/L		106	70 - 130
Trifluralin	1.96	1.82		ug/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	101		70 - 130

Lab Sample ID: MRL 380-157861/22-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0981	0.101		ug/L		103	50 - 150
2,4'-DDD	0.0981	0.0812	J	ug/L		83	50 - 150
2,4'-DDE	0.0981	0.0973	J	ug/L		99	50 - 150
2,4'-DDT	0.0981	0.113		ug/L		115	50 - 150
2,4-Dinitrotoluene	0.0981	0.0989		ug/L		101	50 - 150
2,6-Dinitrotoluene	0.0981	0.0938	J	ug/L		96	50 - 150
2-Methylnaphthalene	0.0981	0.105		ug/L		107	50 - 150
4,4'-DDD	0.0981	0.0944	J	ug/L		96	50 - 150
4,4'-DDE	0.0981	0.0858	J	ug/L		87	50 - 150
4,4'-DDT	0.0981	0.111		ug/L		113	50 - 150
Acenaphthene	0.0981	0.102		ug/L		104	50 - 150
Acenaphthylene	0.0981	0.0868	J	ug/L		88	50 - 150
Acetochlor	0.0981	0.106		ug/L		108	50 - 150
Alachlor	0.0491	0.0529		ug/L		108	50 - 150
alpha-BHC	0.0981	0.0961	J	ug/L		98	50 - 150
alpha-Chlordane	0.0245	<0.028		ug/L		101	50 - 150
Anthracene	0.0196	0.0214		ug/L		109	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MRL 380-157861/22-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	0.0491	0.0537		ug/L		109	50 - 150
Benz(a)anthracene	0.0491	0.0519		ug/L		106	50 - 150
Benzo[a]pyrene	0.0196	0.0199	J	ug/L		102	50 - 150
Benzo[b]fluoranthene	0.0196	0.0264		ug/L		135	50 - 150
Benzo[g,h,i]perylene	0.0491	0.0394	J	ug/L		80	50 - 150
Benzo[k]fluoranthene	0.0196	0.0206		ug/L		105	50 - 150
beta-BHC	0.0981	0.111		ug/L		113	50 - 150
Bis(2-ethylhexyl) phthalate	0.589	0.487	J	ug/L		83	50 - 150
Bromacil	0.0981	0.108		ug/L		110	50 - 150
Butachlor	0.0491	0.0523		ug/L		106	50 - 150
Butylbenzylphthalate	0.491	0.523		ug/L		107	50 - 150
Chlorobenzilate	0.0981	0.0915	J	ug/L		93	50 - 150
Chloroneb	0.0981	0.100		ug/L		102	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0981	0.0920	J	ug/L		94	50 - 150
Chlorpyrifos	0.0491	0.0470	J	ug/L		96	50 - 150
Chrysene	0.0196	0.0213		ug/L		109	50 - 150
delta-BHC	0.0981	0.108		ug/L		110	50 - 150
Di(2-ethylhexyl)adipate	0.589	0.553	J	ug/L		94	50 - 150
Dibenz(a,h)anthracene	0.0491	0.0479	J	ug/L		98	50 - 150
Diclorvos (DDVP)	0.0491	0.0519		ug/L		106	50 - 150
Dieldrin	0.00981	0.0114		ug/L		116	50 - 150
Diethylphthalate	0.491	0.522		ug/L		106	50 - 150
Dimethylphthalate	0.491	0.519		ug/L		106	50 - 150
Di-n-butyl phthalate	0.491	0.621	J	ug/L		127	49 - 243
Di-n-octyl phthalate	0.0981	0.0762	J	ug/L		78	50 - 150
Endosulfan I (Alpha)	0.0981	0.0802	J	ug/L		82	50 - 150
Endosulfan II (Beta)	0.0981	0.101		ug/L		103	50 - 150
Endosulfan sulfate	0.0981	0.0965	J	ug/L		98	50 - 150
Endrin	0.00981	0.00937	J	ug/L		95	50 - 150
Endrin aldehyde	0.0981	0.111		ug/L		113	50 - 150
EPTC	0.0981	0.0928	J	ug/L		95	50 - 150
Fluoranthene	0.0981	0.0988		ug/L		101	50 - 150
Fluorene	0.0491	0.0521		ug/L		106	50 - 150
gamma-Chlordane	0.0245	0.0237	J	ug/L		97	50 - 150
Heptachlor	0.00981	0.00922	J	ug/L		94	50 - 150
Heptachlor epoxide (isomer B)	0.00981	0.0110		ug/L		112	50 - 150
Hexachlorobenzene	0.0491	0.0447	J	ug/L		91	50 - 150
Hexachlorocyclopentadiene	0.0491	0.0527		ug/L		107	50 - 150
Indeno[1,2,3-cd]pyrene	0.0491	0.0462	J	ug/L		94	50 - 150
Isophorone	0.0981	0.104		ug/L		106	50 - 150
Lindane	0.00981	0.0124		ug/L		127	50 - 150
Malathion	0.0981	0.0984		ug/L		100	50 - 150
Methoxychlor	0.0491	0.0532		ug/L		108	50 - 150
Metolachlor	0.0491	0.0533		ug/L		109	50 - 150
Molinate	0.0981	0.104		ug/L		106	50 - 150
Naphthalene	0.0981	0.0970	J	ug/L		99	50 - 150
Parathion	0.0981	0.0852	J	ug/L		87	50 - 150
Pendimethalin (Penoxaline)	0.0981	0.0967	J	ug/L		99	50 - 150
Phenanthrene	0.0393	0.0430		ug/L		109	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MRL 380-157861/22-A

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Propachlor	0.0491	0.0529		ug/L		108	50 - 150
Pyrene	0.0491	0.0510		ug/L		104	50 - 150
Simazine	0.0491	0.0442	J	ug/L		90	50 - 150
Terbacil	0.0981	0.0871	J	ug/L		89	50 - 150
Terbuthylazine	0.0981	0.0965	J	ug/L		98	50 - 150
Thiobencarb	0.0981	0.100		ug/L		102	50 - 150
trans-Nonachlor	0.0245	<0.026		ug/L		86	50 - 150
Trifluralin	0.0981	0.0976	J	ug/L		99	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	97		70 - 130

Lab Sample ID: 380-154619-AQ-1-A MS

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.97	2.00		ug/L		102	70 - 130
2,4'-DDD	<0.098		1.97	2.19		ug/L		111	70 - 130
2,4'-DDE	<0.098		1.97	2.16		ug/L		109	70 - 130
2,4'-DDT	<0.098		1.97	2.04		ug/L		104	70 - 130
2,4-Dinitrotoluene	<0.098		1.97	1.74		ug/L		88	70 - 130
2,6-Dinitrotoluene	<0.098		1.97	1.85		ug/L		94	70 - 130
2-Methylnaphthalene	<0.098		1.97	1.89		ug/L		95	70 - 130
4,4'-DDD	<0.098		1.97	2.37		ug/L		120	70 - 130
4,4'-DDE	<0.098		1.97	2.15		ug/L		109	70 - 130
4,4'-DDT	<0.098		1.97	2.19		ug/L		111	70 - 130
Acenaphthene	<0.098		1.97	1.99		ug/L		101	70 - 130
Acenaphthylene	<0.098		1.97	2.00		ug/L		101	70 - 130
Acetochlor	<0.098		1.97	2.20		ug/L		112	70 - 130
Alachlor	<0.049		1.97	2.32		ug/L		118	70 - 130
alpha-BHC	<0.098		1.97	2.15		ug/L		109	70 - 130
alpha-Chlordane	<0.049		1.97	2.23		ug/L		113	70 - 130
Anthracene	<0.020		1.97	1.60		ug/L		81	70 - 130
Atrazine	<0.049		1.97	2.36		ug/L		120	70 - 130
Benz(a)anthracene	<0.049		1.97	2.13		ug/L		108	70 - 130
Benzo[a]pyrene	<0.020		1.97	1.87		ug/L		95	70 - 130
Benzo[b]fluoranthene	<0.020		1.97	2.06		ug/L		104	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	2.01		ug/L		102	70 - 130
Benzo[k]fluoranthene	<0.020		1.97	1.97		ug/L		100	70 - 130
beta-BHC	<0.098		1.97	2.51		ug/L		127	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.97	1.78		ug/L		90	70 - 130
Bromacil	<0.098		1.97	1.64		ug/L		83	70 - 130
Butachlor	<0.049		1.97	2.51		ug/L		128	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.38		ug/L		121	70 - 130
Chlorobenzilate	<0.098		1.97	2.42		ug/L		123	70 - 130

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QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154619-AQ-1-A MS

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroneb	<0.098		1.97	2.04		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.97	2.26		ug/L		115	70 - 130
Chlorpyrifos	<0.049		1.97	2.21		ug/L		112	70 - 130
Chrysene	<0.020		1.97	2.05		ug/L		104	70 - 130
delta-BHC	<0.098		1.97	2.33		ug/L		118	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.97	2.06		ug/L		104	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	1.79		ug/L		91	70 - 130
Diclorvos (DDVP)	<0.049		1.97	1.78		ug/L		90	70 - 130
Dieldrin	<0.0098		1.97	2.14		ug/L		109	70 - 130
Diethylphthalate	<0.49		1.97	2.27		ug/L		115	70 - 130
Dimethylphthalate	<0.49		1.97	2.03		ug/L		103	70 - 130
Di-n-butyl phthalate	<0.98		3.94	5.05		ug/L		128	70 - 130
Di-n-octyl phthalate	<0.098		1.97	1.71		ug/L		87	70 - 130
Endosulfan I (Alpha)	<0.098		1.97	2.05		ug/L		104	70 - 130
Endosulfan II (Beta)	<0.098		1.97	2.23		ug/L		113	70 - 130
Endosulfan sulfate	<0.098		1.97	2.37		ug/L		120	70 - 130
Endrin	<0.0098		1.97	2.28		ug/L		116	70 - 130
Endrin aldehyde	<0.098		1.97	1.71		ug/L		87	60 - 130
EPTC	<0.098		1.97	2.03		ug/L		103	70 - 130
Fluoranthene	<0.098		1.97	2.25		ug/L		114	70 - 130
Fluorene	<0.049		1.97	2.04		ug/L		104	70 - 130
gamma-Chlordane	<0.049		1.97	2.25		ug/L		114	70 - 130
Heptachlor	<0.0098		1.97	2.13		ug/L		108	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		1.97	2.19		ug/L		111	70 - 130
Hexachlorobenzene	<0.049		1.97	2.04		ug/L		104	70 - 130
Hexachlorocyclopentadiene	<0.049		1.97	1.83		ug/L		93	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.97	1.97		ug/L		100	70 - 130
Isophorone	<0.098		1.97	1.85		ug/L		94	70 - 130
Lindane	<0.0098		1.97	2.39		ug/L		121	70 - 130
Malathion	<0.098		1.97	2.30		ug/L		117	70 - 130
Methoxychlor	<0.049		1.97	2.14		ug/L		109	70 - 130
Metolachlor	<0.049		1.97	2.26		ug/L		115	70 - 130
Molinate	<0.098		1.97	2.17		ug/L		110	70 - 130
Naphthalene	<0.098		1.97	1.89		ug/L		96	70 - 130
Parathion	<0.098		1.97	2.31		ug/L		117	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.97	2.05		ug/L		104	70 - 130
Phenanthrene	<0.039		1.97	1.91		ug/L		97	70 - 130
Propachlor	<0.049		1.97	2.25		ug/L		114	70 - 130
Pyrene	<0.049		1.97	2.32		ug/L		118	70 - 130
Simazine	<0.049		1.97	2.31		ug/L		117	70 - 130
Terbacil	<0.098		1.97	1.78		ug/L		90	70 - 130
Terbutylazine	<0.098	F1	1.97	2.64	F1	ug/L		134	70 - 130
Thiobencarb	<0.098		1.97	2.40		ug/L		122	70 - 130
trans-Nonachlor	<0.049		1.97	2.27		ug/L		115	70 - 130
Trifluralin	<0.098		1.97	2.01		ug/L		102	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154619-AQ-1-A MS

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 157861

Surrogate	MS %Recovery	MS Qualifier	Limits
Perylene-d12	97		70 - 130
Triphenylphosphate	114		70 - 130

Lab Sample ID: 380-154705-B-1-A DU

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 157861

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
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

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QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154705-B-1-A DU

Matrix: Water

Analysis Batch: 157984

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 157861

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
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
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	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	89		70 - 130
Triphenylphosphate	97		70 - 130

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MB 570-582856/1-A
Matrix: Water
Analysis Batch: 588541

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 582856

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>MB MB Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>	06/11/25 19:25	06/24/25 13:28	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,6-Tribromophenol (Surr)	70		33 - 139				06/11/25 19:25	06/24/25 13:28	1
2-Fluorobiphenyl (Surr)	68		33 - 126				06/11/25 19:25	06/24/25 13:28	1
2-Fluorophenol (Surr)	52		12 - 120				06/11/25 19:25	06/24/25 13:28	1
Nitrobenzene-d5 (Surr)	76		36 - 120				06/11/25 19:25	06/24/25 13:28	1
Phenol-d6 (Surr)	35		10 - 120				06/11/25 19:25	06/24/25 13:28	1
p-Terphenyl-d14 (Surr)	72		47 - 131				06/11/25 19:25	06/24/25 13:28	1

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

Lab Sample ID: MB 570-582856/1-A
Matrix: Water
Analysis Batch: 584594

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 582856

<i>Analyte</i>	<i>Result</i>	<i>MB MB Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1-Methylnaphthalene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
2-Methylnaphthalene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Acenaphthene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Acenaphthylene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Anthracene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Benzo[a]anthracene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Benzo[a]pyrene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Chrysene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Fluoranthene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Fluorene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Naphthalene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Phenanthrene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
Pyrene	<0.20		0.20	ug/L		06/11/25 19:25	06/16/25 14:14	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
2,4,6-Tribromophenol (Surr)	81		28 - 127			06/11/25 19:25	06/16/25 14:14	1
2-Fluorobiphenyl (Surr)	70		31 - 120			06/11/25 19:25	06/16/25 14:14	1
2-Fluorophenol (Surr)	47		17 - 120			06/11/25 19:25	06/16/25 14:14	1
Nitrobenzene-d5 (Surr)	78		27 - 120			06/11/25 19:25	06/16/25 14:14	1
Phenol-d6 (Surr)	29		10 - 120			06/11/25 19:25	06/16/25 14:14	1
p-Terphenyl-d14 (Surr)	80		45 - 120			06/11/25 19:25	06/16/25 14:14	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: LCS 570-582856/2-A

Matrix: Water

Analysis Batch: 584594

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 582856

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	15.5		ug/L		78	47 - 120
2-Methylnaphthalene	20.0	15.4		ug/L		77	43 - 120
Acenaphthene	20.0	19.0		ug/L		95	60 - 132
Acenaphthylene	20.0	19.3		ug/L		97	54 - 126
Anthracene	20.0	19.9		ug/L		99	43 - 120
Benzo[a]anthracene	20.0	20.7		ug/L		104	42 - 133
Benzo[a]pyrene	20.0	20.4		ug/L		102	32 - 148
Benzo[b]fluoranthene	20.0	20.5		ug/L		102	42 - 140
Benzo[g,h,i]perylene	20.0	20.2		ug/L		101	1 - 195
Benzo[k]fluoranthene	20.0	19.1		ug/L		95	25 - 146
Chrysene	20.0	20.2		ug/L		101	44 - 140
Dibenz(a,h)anthracene	20.0	21.0		ug/L		105	1 - 200
Fluoranthene	20.0	20.1		ug/L		101	43 - 121
Fluorene	20.0	19.4		ug/L		97	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	20.4		ug/L		102	1 - 151
Naphthalene	20.0	14.8		ug/L		74	36 - 120
Phenanthrene	20.0	19.5		ug/L		98	65 - 120
Pyrene	20.0	21.2		ug/L		106	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	89		28 - 127
2-Fluorobiphenyl (Surr)	80		31 - 120
2-Fluorophenol (Surr)	60		17 - 120
Nitrobenzene-d5 (Surr)	75		27 - 120
Phenol-d6 (Surr)	40		10 - 120
p-Terphenyl-d14 (Surr)	94		45 - 120

Lab Sample ID: LCSD 570-582856/3-A

Matrix: Water

Analysis Batch: 584594

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 582856

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	16.0		ug/L		80	47 - 120	3	20
2-Methylnaphthalene	20.0	15.9		ug/L		80	43 - 120	3	20
Acenaphthene	20.0	18.1		ug/L		90	60 - 132	5	29
Acenaphthylene	20.0	18.6		ug/L		93	54 - 126	4	45
Anthracene	20.0	18.8		ug/L		94	43 - 120	5	40
Benzo[a]anthracene	20.0	19.7		ug/L		98	42 - 133	5	32
Benzo[a]pyrene	20.0	19.1		ug/L		96	32 - 148	7	43
Benzo[b]fluoranthene	20.0	19.4		ug/L		97	42 - 140	5	43
Benzo[g,h,i]perylene	20.0	18.7		ug/L		93	1 - 195	8	61
Benzo[k]fluoranthene	20.0	18.3		ug/L		91	25 - 146	4	38
Chrysene	20.0	18.9		ug/L		94	44 - 140	7	53
Dibenz(a,h)anthracene	20.0	19.3		ug/L		97	1 - 200	8	75
Fluoranthene	20.0	19.6		ug/L		98	43 - 121	3	40
Fluorene	20.0	18.0		ug/L		90	70 - 120	7	23
Indeno[1,2,3-cd]pyrene	20.0	18.9		ug/L		95	1 - 151	7	60
Naphthalene	20.0	15.2		ug/L		76	36 - 120	2	39

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: LCSD 570-582856/3-A

Matrix: Water

Analysis Batch: 584594

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 582856

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	18.7		ug/L		94	65 - 120	4	24
Pyrene	20.0	19.9		ug/L		99	70 - 120	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	84		28 - 127
2-Fluorobiphenyl (Surr)	75		31 - 120
2-Fluorophenol (Surr)	56		17 - 120
Nitrobenzene-d5 (Surr)	69		27 - 120
Phenol-d6 (Surr)	38		10 - 120
p-Terphenyl-d14 (Surr)	87		45 - 120

Lab Sample ID: 380-154969-A-2-B MS

Matrix: Water

Analysis Batch: 586977

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 582856

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.2	16.5		ug/L		86	36 - 120
2-Methylnaphthalene	<0.19		19.2	16.7		ug/L		87	32 - 124
Acenaphthene	<0.19		19.2	18.1		ug/L		94	47 - 145
Acenaphthylene	<0.19		19.2	18.3		ug/L		95	33 - 145
Anthracene	<0.19		19.2	18.8		ug/L		98	27 - 133
Benzo[a]anthracene	<0.19		19.2	19.7		ug/L		102	33 - 143
Benzo[a]pyrene	<0.19		19.2	19.4		ug/L		101	17 - 163
Benzo[b]fluoranthene	<0.19		19.2	19.2		ug/L		100	24 - 159
Benzo[g,h,i]perylene	<0.19		19.2	18.7		ug/L		97	1 - 219
Benzo[k]fluoranthene	<0.19		19.2	18.4		ug/L		96	11 - 162
Chrysene	<0.19		19.2	19.4		ug/L		101	17 - 168
Dibenz(a,h)anthracene	<0.19		19.2	19.4		ug/L		101	1 - 227
Fluoranthene	<0.19		19.2	19.2		ug/L		100	26 - 137
Fluorene	<0.19		19.2	18.2		ug/L		95	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.2	18.8		ug/L		98	1 - 171
Naphthalene	<0.19		19.2	15.1		ug/L		79	21 - 133
Phenanthrene	<0.19		19.2	18.4		ug/L		96	54 - 120
Pyrene	<0.19		19.2	20.0		ug/L		104	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	98		28 - 127
2-Fluorobiphenyl (Surr)	83		31 - 120
2-Fluorophenol (Surr)	52		17 - 120
Nitrobenzene-d5 (Surr)	68		27 - 120
Phenol-d6 (Surr)	33		10 - 120
p-Terphenyl-d14 (Surr)	91		45 - 120

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154969-A-2-C MSD

Matrix: Water

Analysis Batch: 586977

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 582856

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19		19.3	16.0		ug/L		83	36 - 120	3	30
2-Methylnaphthalene	<0.19		19.3	16.3		ug/L		84	32 - 124	2	30
Acenaphthene	<0.19		19.3	17.6		ug/L		91	47 - 145	3	48
Acenaphthylene	<0.19		19.3	17.8		ug/L		93	33 - 145	2	74
Anthracene	<0.19		19.3	18.5		ug/L		96	27 - 133	2	66
Benzo[a]anthracene	<0.19		19.3	19.7		ug/L		102	33 - 143	0	53
Benzo[a]pyrene	<0.19		19.3	19.3		ug/L		100	17 - 163	0	72
Benzo[b]fluoranthene	<0.19		19.3	19.3		ug/L		100	24 - 159	1	71
Benzo[g,h,i]perylene	<0.19		19.3	18.7		ug/L		97	1 - 219	0	97
Benzo[k]fluoranthene	<0.19		19.3	18.5		ug/L		96	11 - 162	0	63
Chrysene	<0.19		19.3	19.0		ug/L		99	17 - 168	2	87
Dibenz(a,h)anthracene	<0.19		19.3	19.4		ug/L		101	1 - 227	0	126
Fluoranthene	<0.19		19.3	19.2		ug/L		99	26 - 137	0	66
Fluorene	<0.19		19.3	17.9		ug/L		93	59 - 121	2	38
Indeno[1,2,3-cd]pyrene	<0.19		19.3	18.8		ug/L		98	1 - 171	0	99
Naphthalene	<0.19		19.3	14.6		ug/L		76	21 - 133	4	65
Phenanthrene	<0.19		19.3	18.4		ug/L		96	54 - 120	0	39
Pyrene	<0.19		19.3	20.2		ug/L		105	52 - 120	1	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	99		28 - 127
2-Fluorobiphenyl (Surr)	80		31 - 120
2-Fluorophenol (Surr)	47		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	31		10 - 120
p-Terphenyl-d14 (Surr)	93		45 - 120

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

Lab Sample ID: MB 570-587470/10

Matrix: Water

Analysis Batch: 587470

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			06/21/25 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	63		38 - 134		06/21/25 13:12	1

Lab Sample ID: LCS 570-587470/1008

Matrix: Water

Analysis Batch: 587470

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	398		ug/L		100	78 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: LCS 570-587470/1008

Matrix: Water

Analysis Batch: 587470

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		38 - 134

Lab Sample ID: LCSD 570-587470/9

Matrix: Water

Analysis Batch: 587470

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	403		ug/L		101	78 - 120	1	10

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		38 - 134

Lab Sample ID: MRL 570-587470/1003

Matrix: Water

Analysis Batch: 587470

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	<7.9		ug/L		76	50 - 150		

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	73		38 - 134

Lab Sample ID: 380-154969-C-2 MS

Matrix: Water

Analysis Batch: 587470

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	390		ug/L		97	68 - 122		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		38 - 134

Lab Sample ID: 380-154969-C-2 MSD

Matrix: Water

Analysis Batch: 587470

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	402		ug/L		100	68 - 122	3	18

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		38 - 134

QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: MB 570-584549/1-A

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 584549

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		06/16/25 09:11	06/17/25 12:54	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		06/16/25 09:11	06/17/25 12:54	1
C8-C18	<25		25	ug/L		06/16/25 09:11	06/17/25 12:54	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	107		60 - 130			06/16/25 09:11	06/17/25 12:54	1

Lab Sample ID: LCS 570-584549/2-A

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 584549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
C10-C28	1600	1580		ug/L		98	56 - 127	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
n-Octacosane (Surr)	108		60 - 130					

Lab Sample ID: LCSD 570-584549/3-A

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 584549

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1550		ug/L		97	56 - 127	2	23
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane (Surr)	113		60 - 130						

Lab Sample ID: MRL 570-584549/4-A

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 584549

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
C10-C28	0.0200	0.0275		mg/L		137	50 - 150	
Surrogate	MRL %Recovery	MRL Qualifier	Limits					
n-Octacosane (Surr)	107		60 - 130					

Lab Sample ID: 380-154969-B-2-A MS

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 584549

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<27		1720	1670		ug/L		97	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
n-Octacosane (Surr)	106		60 - 130						

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QC Sample Results

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

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

Lab Sample ID: 380-154969-B-2-B MSD

Matrix: Water

Analysis Batch: 585305

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 584549

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<27		1680	1580		ug/L		94	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane (Surr)	104		60 - 130

QC Association Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

GC/MS Semi VOA

Prep Batch: 157861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	525.2	
MB 380-157861/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-157861/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-157861/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-154619-AQ-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-154705-B-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 157984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	525.2	157861
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	525.2	157861
MB 380-157861/21-A	Method Blank	Total/NA	Water	525.2	157861
LCS 380-157861/23-A	Lab Control Sample	Total/NA	Water	525.2	157861
MRL 380-157861/22-A	Lab Control Sample	Total/NA	Water	525.2	157861
380-154619-AQ-1-A MS	Matrix Spike	Total/NA	Water	525.2	157861
380-154705-B-1-A DU	Duplicate	Total/NA	Water	525.2	157861

Prep Batch: 582856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1	
MB 570-582856/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-582856/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-582856/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-154969-A-2-B MS	Matrix Spike	Total/NA	Water	625.1	
380-154969-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 584594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-582856/1-A	Method Blank	Total/NA	Water	625.1 SIM	582856
LCS 570-582856/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	582856
LCSD 570-582856/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	582856

Analysis Batch: 586977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1 SIM	582856
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1 SIM	582856
380-154969-A-2-B MS	Matrix Spike	Total/NA	Water	625.1 SIM	582856
380-154969-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	582856

Analysis Batch: 588541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	625.1	582856
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	625.1	582856
MB 570-582856/1-A	Method Blank	Total/NA	Water	625.1	582856

QC Association Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

GC VOA

Analysis Batch: 587470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	
380-154994-2	TB: Ka'amilo Wells Pump 1	Total/NA	Water	8015B GRO LL	
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	8015B GRO LL	
380-154994-4	TB: Ka'amilo Wells Pump 2	Total/NA	Water	8015B GRO LL	
MB 570-587470/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-587470/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-587470/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-587470/1003	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-154969-C-2 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-154969-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 584549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	3510C	
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	3510C	
MB 570-584549/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-584549/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-584549/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-584549/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-154969-B-2-A MS	Matrix Spike	Total/NA	Water	3510C	
380-154969-B-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 585305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-154994-1	Ka'amilo Wells Pump 1	Total/NA	Water	8015B	584549
380-154994-3	Ka'amilo Wells Pump 2	Total/NA	Water	8015B	584549
MB 570-584549/1-A	Method Blank	Total/NA	Water	8015B	584549
LCS 570-584549/2-A	Lab Control Sample	Total/NA	Water	8015B	584549
LCSD 570-584549/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	584549
MRL 570-584549/4-A	Lab Control Sample	Total/NA	Water	8015B	584549
380-154969-B-2-A MS	Matrix Spike	Total/NA	Water	8015B	584549
380-154969-B-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	584549

Lab Chronicle

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Client Sample ID: Ka'amilo Wells Pump 1

Lab Sample ID: 380-154994-1

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			157861	IQ42	EA POM	06/13/25 13:19
Total/NA	Analysis	525.2		1	157984	Q8LA	EA POM	06/15/25 19:38
Total/NA	Prep	625.1			582856	TR8L	EET CAL 4	06/12/25 16:14
Total/NA	Analysis	625.1		1	588541	AX7Z	EET CAL 4	06/24/25 15:25
Total/NA	Prep	625.1			582856	TR8L	EET CAL 4	06/12/25 16:14
Total/NA	Analysis	625.1 SIM		1	586977	PQS1	EET CAL 4	06/20/25 14:21
Total/NA	Analysis	8015B GRO LL		1	587470	BH4T	EET CAL 4	06/21/25 19:56
Total/NA	Prep	3510C			584549	TVD6	EET CAL 4	06/16/25 09:11
Total/NA	Analysis	8015B		1	585305	E5RH	EET CAL 4	06/17/25 16:12

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

Lab Sample ID: 380-154994-2

Date Collected: 06/09/25 11:36

Matrix: Water

Date Received: 06/11/25 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	587470	BH4T	EET CAL 4	06/21/25 15:26

Client Sample ID: Ka'amilo Wells Pump 2

Lab Sample ID: 380-154994-3

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			157861	IQ42	EA POM	06/13/25 13:19
Total/NA	Analysis	525.2		1	157984	Q8LA	EA POM	06/15/25 19:58
Total/NA	Prep	625.1			582856	TR8L	EET CAL 4	06/12/25 16:14
Total/NA	Analysis	625.1		1	588541	AX7Z	EET CAL 4	06/24/25 15:48
Total/NA	Prep	625.1			582856	TR8L	EET CAL 4	06/12/25 16:14
Total/NA	Analysis	625.1 SIM		1	586977	PQS1	EET CAL 4	06/20/25 14:44
Total/NA	Analysis	8015B GRO LL		1	587470	BH4T	EET CAL 4	06/21/25 19:33
Total/NA	Prep	3510C			584549	TVD6	EET CAL 4	06/16/25 09:11
Total/NA	Analysis	8015B		1	585305	E5RH	EET CAL 4	06/17/25 16:34

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

Lab Sample ID: 380-154994-4

Date Collected: 06/09/25 11:00

Matrix: Water

Date Received: 06/11/25 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	587470	BH4T	EET CAL 4	06/21/25 15:04

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: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/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
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/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	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25
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: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/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: 380-154994-1
SDG: Weekly: Ka'amilo Wells Pump1/Pump 2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-154994-1	Ka'amilo Wells Pump 1	Water	06/09/25 11:36	06/11/25 09:30
380-154994-2	TB: Ka'amilo Wells Pump 1	Water	06/09/25 11:36	06/11/25 09:30
380-154994-3	Ka'amilo Wells Pump 2	Water	06/09/25 11:00	06/11/25 09:30
380-154994-4	TB: Ka'amilo Wells Pump 2	Water	06/09/25 11:00	06/11/25 09:30

Chain of Custody Record

Client Information		Sampler: <u>Olaf Happe</u>		Lab PM: <u>Arada, Rachelle</u>	Carrier Tracking No(s):	COC No: <u>380-28005-2757 1</u>									
Client Contact: <u>Mr Kirk Iwamoto</u>		Phone: <u>+1 808 748 5840</u>		E-Mail: <u>Rachelle Arada@et.eurofins.com</u>	State of Origin:	Page: <u>Page 1 of 1</u>									
Company: <u>City & County of Honolulu</u>		PWSID:		Job #:											
Address: <u>630 South Beretania Street Chemistry Lab</u>		Analysis Requested													
City: <u>Honolulu</u>		Due Date Requested													
State Zip: <u>HI, 96843</u>		TAT Requested (days)													
Phone: <u>808-748-5840 (Tel)</u>		Compliance Project ☐ Yes ☐ No													
Email: <u>kiwamoto@hbws.org</u>		PO # <u>C20525101 exp 05312023</u>													
Project Name: <u>RED-HILL/HBWS Sites Event Desc RUSH Weekly Red Hill</u>		WO #													
Site: <u>Hawaii</u>		Project #: <u>3800111</u>													
		SSOW#													
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625.1, 625.1, SIM	8015B_GRO_LL - (MOD) GRO	8015B_DRO_LL_CS - HNL Ranges C10-C24/C24-C36/C38-C18	525.2, PREC - (MOD) 525plus Plus Tics	537.1, DW, PREC - 537.1 Full List	533 - All Analytes	Total Number of Containers	Special Instructions/Note:	
Ka'amilo Wells Pump 1	9-Jun-2025	1130	Water	Water	2	3	2	2	2	2	2	2	2	2	Acetic Acid, 30% v/v
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	9-Jun-2025	1130	Water	Water	2	3	2	2	2	2	2	2	2	2	Acetic Acid, 30% v/v
Ka'amilo Wells Pump 2	9-Jun-2025	1100	Water	Water	2	3	2	2	2	2	2	2	2	2	
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	9-Jun-2025	1100	Water	Water	2	3	2	2	2	2	2	2	2	2	Acetic Acid, 30% v/v
Possible Hazard Identification															
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological															
Deliverable Requested I, II, III, IV, Other (specify)															
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months															
Special Instructions/QC Requirements															
Empty Kit Relinquished by															
Relinquished by															
Relinquished by															
Relinquished by															
Custody Seals Intact. ☐ Yes ☐ No															
Custody Seal No															

Chain of Custody Record



Environment Testing

Client Information		Sampler		Lab PM		Carrier Tracking No(s)		COC No:	
Client Contact: Mr Kirk Iwamoto		Olaf Happe / Jason R. McElroy		Arada, Rachelle				380-28005-2757 1	
Company: City & County of Honolulu		Phone: +1 808 748 5840		E-Mail: Rachelle Arada@eurofins.com		State of Origin:		Page 1 of 1	
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested		TAT Requested (days)		Analysis Requested		Job #:	
City: Honolulu		Compliance Project		Delta Yes / No		Preservation Codes:		R - NaThioSO4 RA - NaThioHCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate	
State, Zip: HI, 96843		PO #:		C20525101 exp 05312023		Field Filtered Sample (Yes or No)		Other:	
Phone: 806-748-5840 (Tel)		WO #:		Project #:		Perform MS/MSD (Yes or No)		Total Number of Containers	
Email: kiwamoto@hbws.org		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, B=soil, O=water, A=air)	
Project Name: RED-HILL/HBWS Sites Event Desc. RUSH Weekly Red Hill		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, B=soil, O=water, A=air)	
Site: Hawaii		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, B=soil, O=water, A=air)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, B=soil, O=water, A=air)	
Ka'amilo Wells Pump 1		9-Jun-2025		1130		G		Water	
Ka'amilo Wells Pump 1 (Matrix Spike)								Water	
Ka'amilo Wells Pump 1 (Matrix Spike Duplicate)								Water	
TB: Ka'amilo Wells Pump 1		9-Jun-2025		1130		G		Water	
Ka'amilo Wells Pump 2		9-Jun-2025		1100		G		Water	
Ka'amilo Wells Pump 2 (Matrix Spike)								Water	
Ka'amilo Wells Pump 2 (Matrix Spike Duplicate)								Water	
TB: Ka'amilo Wells Pump 2		9-Jun-2025		1100		G		Water	
Possible Hazard Identification		Non-Hazard		Flammable		Skin Irritant		Poison B	
Deliverable Requested I, II, III, IV, Other (specify)		Unknown		Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client	
Empty Kit Relinquished by		Date		Time		Method of Shipment		Archive For	
Relinquished by		Date/Time		Date/Time		Date/Time		Company	
Relinquished by		Date/Time		Date/Time		Date/Time		Company	
Relinquished by		Date/Time		Date/Time		Date/Time		Company	
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		6/18/25 9:30		6/18/25 9:30	
Delta Yes / No		Delta Yes / No		Delta Yes / No		Delta Yes / No		Delta Yes / No	

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-154994-1

SDG Number: Weekly: Ka'amilo Wells Pump1/Pump 2

Login Number: 154994

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.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
CIO4 headspace requirement met (>50% for CA, >30% for other states).	N/A	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-154994-1

SDG Number: Weekly: Ka'amilo Wells Pump1/Pump 2

Login Number: 154994

List Number: 2

Creator: Skinner, Alma D

List Source: Eurofins Calscience

List Creation: 06/12/25 03:54 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.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	