

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Moanalua Wells

JOB NUMBER

380-159486-1

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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Table of Contents

Cover Page 1

Table of Contents 3

Definitions/Glossary 4

Case Narrative 5

Detection Summary 6

Client Sample Results 7

Action Limit Summary 11

Surrogate Summary 12

QC Sample Results 14

QC Association Summary 31

Lab Chronicle 33

Certification Summary 34

Method Summary 36

Sample Summary 37

Chain of Custody 38

Receipt Checklists 40



Definitions/Glossary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Qualifiers

GC/MS Semi VOA

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

GC/MS Semi VOA TICs

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

GC VOA

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

GC Semi VOA

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

Glossary

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

Case Narrative

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

Job ID: 380-159486-1

Job ID: 380-159486-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-159486-1

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

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

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

Receipt

The samples were received on 7/9/2025 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C.

GC/MS Semi VOA

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

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: Diesel Range Organics (C10-C24) was detected above the reporting limit (RL) in the MOANALUA WELLS (380-159486-1) associated with preparation batch 570-596824 and analytical batch 570-599363. The sample was re-extracted and re-analyzed. Both data has a detected Diesel Range Organics (C10-C24) above the reporting limits; therefore, the sample has been reported.

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

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS Lab Sample ID: 380-159486-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics (C10-C24)	40		26	ug/L	1		8015B	Total/NA

Client Sample ID: TB:MOANALUA WELLS Lab Sample ID: 380-159486-2

No Detections.

This Detection Summary does not include radiochemical test results.



Client Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-159486-1

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2,4'-DDD	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2,4'-DDE	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2,4'-DDT	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
2-Methylnaphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
4,4'-DDD	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
4,4'-DDE	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
4,4'-DDT	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Acenaphthene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Acenaphthylene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Acetochlor	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Alachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
alpha-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
alpha-Chlordane	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Anthracene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 17:08	1
Atrazine	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Benz(a)anthracene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 17:08	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 17:08	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 17:08	1
beta-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 17:08	1
Bromacil	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Butachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Butylbenzylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 17:08	1
Chlorobenzilate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Chloroneb	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Chlorpyrifos	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Chrysene	<0.020		0.020	ug/L		07/11/25 07:36	07/11/25 17:08	1
delta-BHC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		07/11/25 07:36	07/11/25 17:08	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Dieldrin	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Diethylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 17:08	1
Dimethylphthalate	<0.49		0.49	ug/L		07/11/25 07:36	07/11/25 17:08	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		07/11/25 07:36	07/11/25 17:08	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Endosulfan sulfate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Endrin	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Endrin aldehyde	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
EPTC	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Fluoranthene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-159486-1

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
gamma-Chlordane	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Heptachlor	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Hexachlorobenzene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Isophorone	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Lindane	<0.0099		0.0099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Malathion	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Methoxychlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Metolachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Molinate	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Naphthalene	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Parathion	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Phenanthrene	<0.040		0.040	ug/L		07/11/25 07:36	07/11/25 17:08	1
Propachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Pyrene	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Simazine	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Terbacil	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Terbutylazine	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Thiobencarb	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/11/25 07:36	07/11/25 17:08	1
trans-Nonachlor	<0.049		0.049	ug/L		07/11/25 07:36	07/11/25 17:08	1
Trifluralin	<0.099		0.099	ug/L		07/11/25 07:36	07/11/25 17:08	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.87	T J	ug/L		6.18	N/A	07/11/25 07:36	07/11/25 17:08	1
Unknown	0.60	T J	ug/L		6.64	N/A	07/11/25 07:36	07/11/25 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	94		70 - 130	07/11/25 07:36	07/11/25 17:08	1
Perylene-d12	92		70 - 130	07/11/25 07:36	07/11/25 17:08	1
Triphenylphosphate	115		70 - 130	07/11/25 07:36	07/11/25 17:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
2-Methylnaphthalene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Acenaphthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Acenaphthylene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Benzo[a]anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Benzo[a]pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Chrysene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-159486-1

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Fluorene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Naphthalene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Phenanthrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1
Pyrene	<0.19		0.19	ug/L		07/12/25 10:28	07/22/25 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		28 - 127	07/12/25 10:28	07/22/25 14:11	1
2-Fluorobiphenyl (Surr)	81		31 - 120	07/12/25 10:28	07/22/25 14:11	1
2-Fluorophenol (Surr)	47		17 - 120	07/12/25 10:28	07/22/25 14:11	1
Nitrobenzene-d5 (Surr)	85		27 - 120	07/12/25 10:28	07/22/25 14:11	1
Phenol-d6 (Surr)	30		10 - 120	07/12/25 10:28	07/22/25 14:11	1
p-Terphenyl-d14 (Surr)	95		45 - 120	07/12/25 10:28	07/22/25 14:11	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/12/25 10:28	07/22/25 16:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	60		33 - 139	07/12/25 10:28	07/22/25 16:55	1
2-Fluorobiphenyl (Surr)	74		33 - 126	07/12/25 10:28	07/22/25 16:55	1
2-Fluorophenol (Surr)	38		12 - 120	07/12/25 10:28	07/22/25 16:55	1
Nitrobenzene-d5 (Surr)	77		36 - 120	07/12/25 10:28	07/22/25 16:55	1
Phenol-d6 (Surr)	20		10 - 120	07/12/25 10:28	07/22/25 16:55	1
p-Terphenyl-d14 (Surr)	81		47 - 131	07/12/25 10:28	07/22/25 16:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			07/20/25 15:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		38 - 134		07/20/25 15:40	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)	40		26	ug/L		07/14/25 10:41	07/19/25 04:37	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		07/14/25 10:41	07/19/25 04:37	1
C8-C18	<26		26	ug/L		07/14/25 10:41	07/19/25 04:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	95		60 - 130	07/14/25 10:41	07/19/25 04:37	1

Client Sample ID: TB:MOANALUA WELLS

Lab Sample ID: 380-159486-2

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			07/20/25 23:10	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: TB:MOANALUA WELLS

Lab Sample ID: 380-159486-2

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		38 - 134		07/20/25 23:10	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Action Limit Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-159486-1

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	<0.0099		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: 380-159486-1
SDG: Weekly: Moanalua Wells

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)
380-159057-Y-1-A MS	Matrix Spike	92	98	114
380-159447-D-1-A DU	Duplicate	93	94	111
380-159486-1	MOANALUA WELLS	94	92	115
LCS 380-162217/23-A	Lab Control Sample	93	100	114
LCSD 380-162217/24-A	Lab Control Sample Dup	93	99	117
MB 380-162217/21-A	Method Blank	93	92	111
MRL 380-162217/22-A	Lab Control Sample	94	94	115

Surrogate Legend

2NMX = 2-Nitro-m-xylene

PRY = Perylene-d12

TPP = Triphenylphosphate

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

Matrix: Water

Prep Type: Total/NA

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)
380-159486-1	MOANALUA WELLS	60	74	38	77	20	81
MB 570-593529/1-A	Method Blank	54	62	33	66	21	63

Surrogate Legend

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

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water

Prep Type: Total/NA

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)
380-159486-1	MOANALUA WELLS	89	81	47	85	30	95
380-159486-1 MS	MOANALUA WELLS	97	83	51	84	33	90
380-159486-1 MSD	MOANALUA WELLS	96	85	54	82	35	88
LCS 570-596307/2-A	Lab Control Sample	93	91	55	79	35	92
LCSD 570-596307/3-A	Lab Control Sample Dup	93	89	56	88	36	88
MB 570-596307/1-A	Method Blank	93	72	41	73	24	92

Surrogate Legend

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

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-159486-1	MOANALUA WELLS	78
380-159486-1 MS	MOANALUA WELLS	98
380-159486-1 MSD	MOANALUA WELLS	100
380-159486-2	TB:MOANALUA WELLS	83
LCS 570-599688/1008	Lab Control Sample	99
LCSD 570-599688/9	Lab Control Sample Dup	89
MB 570-599688/10	Method Blank	79
MRL 570-599688/11	Lab Control Sample	82

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-159486-1	MOANALUA WELLS	95
380-159486-1 MS	MOANALUA WELLS	111
380-159486-1 MSD	MOANALUA WELLS	109
LCS 570-596824/2-A	Lab Control Sample	105
LCSD 570-596824/3-A	Lab Control Sample Dup	101
MB 570-596824/1-A	Method Blank	92
MRL 570-596824/4-A	Lab Control Sample	94

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 162217

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

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QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 162217

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

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

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

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QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 162217

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

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 162217

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 162217

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

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 162217

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 162297

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 162217

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

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

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

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

Matrix: Water

Analysis Batch: 600481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 593529

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

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 596307

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

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

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

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596307

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596307

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

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

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

Matrix: Water

Analysis Batch: 600411

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 596307

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

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

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

Lab Sample ID: 380-159486-1 MS

Matrix: Water

Analysis Batch: 600411

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.8	17.4		ug/L		88	36 - 120
2-Methylnaphthalene	<0.19		19.8	17.1		ug/L		86	32 - 124
Acenaphthene	<0.19		19.8	17.1		ug/L		86	47 - 145
Acenaphthylene	<0.19		19.8	16.3		ug/L		82	33 - 145
Anthracene	<0.19		19.8	17.0		ug/L		86	27 - 133
Benzo[a]anthracene	<0.19		19.8	17.7		ug/L		89	33 - 143
Benzo[a]pyrene	<0.19		19.8	16.2		ug/L		82	17 - 163
Benzo[b]fluoranthene	<0.19		19.8	17.5		ug/L		88	24 - 159
Benzo[g,h,i]perylene	<0.19		19.8	18.2		ug/L		92	1 - 219
Benzo[k]fluoranthene	<0.19		19.8	17.0		ug/L		86	11 - 162
Chrysene	<0.19		19.8	18.0		ug/L		91	17 - 168
Dibenz(a,h)anthracene	<0.19		19.8	18.8		ug/L		95	1 - 227
Fluoranthene	<0.19		19.8	17.8		ug/L		90	26 - 137
Fluorene	<0.19		19.8	17.6		ug/L		89	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.8	17.4		ug/L		88	1 - 171
Naphthalene	<0.19		19.8	17.1		ug/L		86	21 - 133
Phenanthrene	<0.19		19.8	17.8		ug/L		90	54 - 120
Pyrene	<0.19		19.8	18.9		ug/L		95	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	97		28 - 127
2-Fluorobiphenyl (Surr)	83		31 - 120
2-Fluorophenol (Surr)	51		17 - 120
Nitrobenzene-d5 (Surr)	84		27 - 120
Phenol-d6 (Surr)	33		10 - 120
p-Terphenyl-d14 (Surr)	90		45 - 120

Lab Sample ID: 380-159486-1 MSD

Matrix: Water

Analysis Batch: 600411

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19		19.6	16.7		ug/L		86	36 - 120	4	30
2-Methylnaphthalene	<0.19		19.6	16.3		ug/L		83	32 - 124	5	30
Acenaphthene	<0.19		19.6	17.6		ug/L		90	47 - 145	3	48
Acenaphthylene	<0.19		19.6	17.0		ug/L		87	33 - 145	4	74
Anthracene	<0.19		19.6	16.3		ug/L		83	27 - 133	4	66
Benzo[a]anthracene	<0.19		19.6	17.8		ug/L		91	33 - 143	1	53
Benzo[a]pyrene	<0.19		19.6	16.6		ug/L		85	17 - 163	2	72
Benzo[b]fluoranthene	<0.19		19.6	17.6		ug/L		90	24 - 159	1	71
Benzo[g,h,i]perylene	<0.19		19.6	17.9		ug/L		91	1 - 219	2	97
Benzo[k]fluoranthene	<0.19		19.6	17.5		ug/L		89	11 - 162	3	63
Chrysene	<0.19		19.6	17.8		ug/L		91	17 - 168	1	87
Dibenz(a,h)anthracene	<0.19		19.6	18.1		ug/L		92	1 - 227	4	126
Fluoranthene	<0.19		19.6	18.4		ug/L		94	26 - 137	3	66
Fluorene	<0.19		19.6	18.2		ug/L		93	59 - 121	3	38
Indeno[1,2,3-cd]pyrene	<0.19		19.6	17.0		ug/L		87	1 - 171	3	99
Naphthalene	<0.19		19.6	16.1		ug/L		83	21 - 133	6	65

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

Lab Sample ID: 380-159486-1 MSD

Matrix: Water

Analysis Batch: 600411

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Prep Batch: 596307

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.6	18.0		ug/L		92	54 - 120	1	39
Pyrene	<0.19		19.6	19.0		ug/L		97	52 - 120	1	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	96		28 - 127
2-Fluorobiphenyl (Surr)	85		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	82		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	88		45 - 120

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

Lab Sample ID: MB 570-599688/10

Matrix: Water

Analysis Batch: 599688

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			07/20/25 14:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		38 - 134		07/20/25 14:56	1

Lab Sample ID: LCS 570-599688/1008

Matrix: Water

Analysis Batch: 599688

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	379		ug/L		95	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		38 - 134

Lab Sample ID: LCSD 570-599688/9

Matrix: Water

Analysis Batch: 599688

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	389		ug/L		97	78 - 120	3	10

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		38 - 134

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

Lab Sample ID: MRL 570-599688/11

Matrix: Water

Analysis Batch: 599688

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	MRL	MRL				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (C4-C13)			10.0	8.45	J	ug/L		85	50 - 150		
Surrogate	MRL	MRL									
	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	82		38 - 134								

Lab Sample ID: 380-159486-1 MS

Matrix: Water

Analysis Batch: 599688

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	379		ug/L		95	68 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		38 - 134						

Lab Sample ID: 380-159486-1 MSD

Matrix: Water

Analysis Batch: 599688

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	380		ug/L		95	68 - 122	0	18
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	100		38 - 134								

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

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

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 596824

Sample Data: 000000									
Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier							
Diesel Range Organics (C10-C24)	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21		1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21		1
C8-C18	<25		25	ug/L		07/14/25 10:40	07/19/25 01:21		1
Sample Data: 000000									
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac	
	%Recovery	Qualifier							
n-Octacosane (Surr)	92		60 - 130			07/14/25 10:40	07/19/25 01:21		

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

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1520		ug/L		95	56 - 127

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

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

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

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	105		60 - 130

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

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 596824

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C10-C28			1600	1470		ug/L		92	56 - 127	4	23
Surrogate		LCSD									
n-Octacosane (Surr)		%Recovery	Qualifier	Limits							
		101		60 - 130							

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

Matrix: Water

Analysis Batch: 599363

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 596824

			Spike	MRL	MRL				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
C10-C28			0.0200	0.0225	J	mg/L		113	50 - 150		
Surrogate		MRL									
n-Octacosane (Surr)		%Recovery	Qualifier	Limits							
		94		60 - 130							

Lab Sample ID: 380-159486-1 MS

Matrix: Water

Analysis Batch: 599363

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Prep Batch: 596824

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

Lab Sample ID: 380-159486-1 MSD

Matrix: Water

Analysis Batch: 599363

Client Sample ID: MOANALUA WELLS

Prep Type: Total/NA

Prep Batch: 596824

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

QC Association Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

GC/MS Semi VOA

Prep Batch: 162217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	525.2	
MB 380-162217/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-162217/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-162217/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-162217/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-159057-Y-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-159447-D-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 162297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	525.2	162217
MB 380-162217/21-A	Method Blank	Total/NA	Water	525.2	162217
LCS 380-162217/23-A	Lab Control Sample	Total/NA	Water	525.2	162217
LCSD 380-162217/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	162217
MRL 380-162217/22-A	Lab Control Sample	Total/NA	Water	525.2	162217
380-159057-Y-1-A MS	Matrix Spike	Total/NA	Water	525.2	162217
380-159447-D-1-A DU	Duplicate	Total/NA	Water	525.2	162217

Prep Batch: 593529

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

Prep Batch: 596307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	625.1	
MB 570-596307/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-596307/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-596307/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-159486-1 MS	MOANALUA WELLS	Total/NA	Water	625.1	
380-159486-1 MSD	MOANALUA WELLS	Total/NA	Water	625.1	

Analysis Batch: 600411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	625.1 SIM	596307
MB 570-596307/1-A	Method Blank	Total/NA	Water	625.1 SIM	596307
LCS 570-596307/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	596307
LCSD 570-596307/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	596307
380-159486-1 MS	MOANALUA WELLS	Total/NA	Water	625.1 SIM	596307
380-159486-1 MSD	MOANALUA WELLS	Total/NA	Water	625.1 SIM	596307

Analysis Batch: 600481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	625.1	596307
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1	593529

GC VOA

Analysis Batch: 599688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	8015B GRO LL	
380-159486-2	TB:MOANALUA WELLS	Total/NA	Water	8015B GRO LL	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

GC VOA (Continued)

Analysis Batch: 599688 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-599688/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-599688/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-599688/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-599688/11	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-159486-1 MS	MOANALUA WELLS	Total/NA	Water	8015B GRO LL	
380-159486-1 MSD	MOANALUA WELLS	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 596824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	3510C	
MB 570-596824/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-596824/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-596824/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-596824/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-159486-1 MS	MOANALUA WELLS	Total/NA	Water	3510C	
380-159486-1 MSD	MOANALUA WELLS	Total/NA	Water	3510C	

Analysis Batch: 599363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-159486-1	MOANALUA WELLS	Total/NA	Water	8015B	596824
MB 570-596824/1-A	Method Blank	Total/NA	Water	8015B	596824
LCS 570-596824/2-A	Lab Control Sample	Total/NA	Water	8015B	596824
LCSD 570-596824/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	596824
MRL 570-596824/4-A	Lab Control Sample	Total/NA	Water	8015B	596824
380-159486-1 MS	MOANALUA WELLS	Total/NA	Water	8015B	596824
380-159486-1 MSD	MOANALUA WELLS	Total/NA	Water	8015B	596824

Lab Chronicle

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-159486-1

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			162217	OTM3	EA POM	07/11/25 07:36
Total/NA	Analysis	525.2		1	162297	Q8LA	EA POM	07/11/25 17:08
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1		1	600481	CG	EET CAL 4	07/22/25 16:55
Total/NA	Prep	625.1			596307	H1SH	EET CAL 4	07/12/25 10:28
Total/NA	Analysis	625.1 SIM		1	600411	PQS1	EET CAL 4	07/22/25 14:11
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 15:40
Total/NA	Prep	3510C			596824	TVD6	EET CAL 4	07/14/25 10:41
Total/NA	Analysis	8015B		1	599363	NR	EET CAL 4	07/19/25 04:37

Client Sample ID: TB:MOANALUA WELLS

Lab Sample ID: 380-159486-2

Date Collected: 07/07/25 09:44

Matrix: Water

Date Received: 07/09/25 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	599688	W4LC	EET CAL 4	07/20/25 23:10

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Water	1-Methylnaphthalene
525.2	525.2	Water	2,4'-DDD
525.2	525.2	Water	2,4'-DDE
525.2	525.2	Water	2,4'-DDT
525.2	525.2	Water	2,4-Dinitrotoluene
525.2	525.2	Water	2,6-Dinitrotoluene
525.2	525.2	Water	2-Methylnaphthalene
525.2	525.2	Water	4,4'-DDD
525.2	525.2	Water	4,4'-DDE
525.2	525.2	Water	4,4' DDT
525.2	525.2	Water	Acetochlor
525.2	525.2	Water	alpha-BHC
525.2	525.2	Water	alpha-Chlordane
525.2	525.2	Water	beta-BHC
525.2	525.2	Water	Chlorobenzilate
525.2	525.2	Water	Chloroneb
525.2	525.2	Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Water	Chlorpyrifos
525.2	525.2	Water	delta-BHC
525.2	525.2	Water	Diclorvos (DDVP)
525.2	525.2	Water	Endosulfan I (Alpha)
525.2	525.2	Water	Endosulfan II (Beta)
525.2	525.2	Water	Endosulfan sulfate
525.2	525.2	Water	Endrin aldehyde
525.2	525.2	Water	EPTC
525.2	525.2	Water	gamma-Chlordane
525.2	525.2	Water	Isophorone
525.2	525.2	Water	Malathion
525.2	525.2	Water	Parathion
525.2	525.2	Water	Pendimethalin (Penoxaline)
525.2	525.2	Water	Terbacil
525.2	525.2	Water	Terbutylazine
525.2	525.2	Water	Total Permethrin (mixed isomers)
525.2	525.2	Water	trans-Nonachlor

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-159486-1
SDG: Weekly: Moanalua Wells

Laboratory: Eurofins Calscience (Continued)

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

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
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: 380-159486-1
SDG: Weekly: Moanalua Wells

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

Protocol References:

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

EPA = US Environmental Protection Agency

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

Laboratory References:

EA POM = Eurofins 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: 380-159486-1
SDG: Weekly: Moanalua Wells

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-159486-1	MOANALUA WELLS	Water	07/07/25 09:44	07/09/25 09:30
380-159486-2	TB:MOANALUA WELLS	Water	07/07/25 09:44	07/09/25 09:30

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Environment Testing



380-159486 COC

Chain of Custody Record



Eny

Loc: 380

159486

[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-159486-1

SDG Number: Weekly: Moanalua Wells

Login Number: 159486

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Sanchez Velasquez, Gustavo

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-159486-1
SDG Number: Weekly: Moanalua Wells

Login Number: 159486

List Number: 2

Creator: Mills, Mary

List Source: Eurofins Calscience

List Creation: 07/10/25 09:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5, 2.3, 3.5, 2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	