

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 310
Honolulu, Hawaii 96843

Generated 11/6/2024 9:02:35 AM

JOB DESCRIPTION

RED-HILL
Weekly

JOB NUMBER

380-119107-1

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



Generated
11/6/2024 9:02:35 AM

Authorized for release by
Rachelle Arada, Project Manager
Rachelle.Arada@et.eurofinsus.com
(626)386-1106



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	14
Surrogate Summary	15
QC Sample Results	18
QC Association Summary	36
Lab Chronicle	38
Certification Summary	39
Method Summary	41
Sample Summary	42
Chain of Custody	43
Receipt Checklists	45

Definitions/Glossary

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

Job ID: 380-119107-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
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.
S1+	Surrogate recovery exceeds control limits, high biased.

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: 380-119107-1

Job ID: 380-119107-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-119107-1

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 10/23/2024 10:25 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.8°C, 2.1°C, 2.5°C and 3.6°C.

GC/MS Semi VOA

Method 625.1: The continuing calibration verification (CCV) associated with batch 570-499435 recovered above the upper control limit for 4,6-Dinitro-2-methylphenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 570-499435/2).

Method 625.1_SIM: Surrogate recovery for the following sample was outside the upper control limit: AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-119107-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

No Detections.

Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-119107-2

No Detections.

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-119107-3

No Detections.

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)
(331-203-TP400)**

Lab Sample ID: 380-119107-4

No Detections.

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

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

Date Collected: 10/21/24 10:34

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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		10/24/24 08:16	10/25/24 21:49	1
2,4'-DDD	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
2,4'-DDE	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
2,4'-DDT	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
2-Methylnaphthalene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
4,4'-DDD	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
4,4'-DDE	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
4,4'-DDT	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Acenaphthene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Acenaphthylene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Acetochlor	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Alachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
alpha-BHC	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
alpha-Chlordane	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Anthracene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 21:49	1
Atrazine	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Benz(a)anthracene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Benzo[a]pyrene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 21:49	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 21:49	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 21:49	1
beta-BHC	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		10/24/24 08:16	10/25/24 21:49	1
Bromacil	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Butachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Butylbenzylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 21:49	1
Chlorobenzilate	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Chloroneb	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Chlorpyrifos	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Chrysene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 21:49	1
delta-BHC	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		10/24/24 08:16	10/25/24 21:49	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Dieldrin	<0.0098	^3+	0.0098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Diethylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 21:49	1
Dimethylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 21:49	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		10/24/24 08:16	10/25/24 21:49	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Endosulfan sulfate	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Endrin	<0.0098		0.0098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Endrin aldehyde	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
EPTC	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

Date Collected: 10/21/24 10:34

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Fluorene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
gamma-Chlordane	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Heptachlor	<0.0098	^3+	0.0098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Hexachlorobenzene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Isophorone	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Lindane	<0.0098		0.0098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Malathion	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Methoxychlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Metolachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Molinate	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Naphthalene	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Parathion	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Phenanthrene	<0.039		0.039	ug/L		10/24/24 08:16	10/25/24 21:49	1
Propachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Pyrene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Simazine	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Terbacil	<0.098	*+	0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Terbutylazine	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Thiobencarb	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		10/24/24 08:16	10/25/24 21:49	1
trans-Nonachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 21:49	1
Trifluralin	<0.098		0.098	ug/L		10/24/24 08:16	10/25/24 21:49	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/24/24 08:16	10/25/24 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	10/24/24 08:16	10/25/24 21:49	1
Perylene-d12	88		70 - 130	10/24/24 08:16	10/25/24 21:49	1
Triphenylphosphate	104		70 - 130	10/24/24 08:16	10/25/24 21:49	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		10/28/24 12:16	11/04/24 17:30	1
2-Methylnaphthalene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Acenaphthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Acenaphthylene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Benzo[a]anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Benzo[a]pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Chrysene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

Date Collected: 10/21/24 10:34

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Fluorene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Naphthalene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Phenanthrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	102		28 - 127			10/28/24 12:16	11/04/24 17:30	1
2-Fluorobiphenyl (Surr)	100		31 - 120			10/28/24 12:16	11/04/24 17:30	1
2-Fluorophenol (Surr)	50		17 - 120			10/28/24 12:16	11/04/24 17:30	1
Nitrobenzene-d5 (Surr)	94		27 - 120			10/28/24 12:16	11/04/24 17:30	1
Phenol-d6 (Surr)	32		10 - 120			10/28/24 12:16	11/04/24 17:30	1
p-Terphenyl-d14 (Surr)	121	S1+	45 - 120			10/28/24 12:16	11/04/24 17:30	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
Methylene Chloride	30	T J N	ug/L		2.00	75-09-2	10/28/24 12:16	11/05/24 10:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	99		33 - 139				10/28/24 12:16	11/05/24 10:36	1
2-Fluorobiphenyl (Surr)	97		33 - 126				10/28/24 12:16	11/05/24 10:36	1
2-Fluorophenol (Surr)	56		12 - 120				10/28/24 12:16	11/05/24 10:36	1
Nitrobenzene-d5 (Surr)	107		36 - 120				10/28/24 12:16	11/05/24 10:36	1
Phenol-d6 (Surr)	34		10 - 120				10/28/24 12:16	11/05/24 10:36	1
p-Terphenyl-d14 (Surr)	95		47 - 131				10/28/24 12:16	11/05/24 10:36	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			10/25/24 18:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		38 - 134				10/25/24 18:07	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		10/25/24 12:00	10/27/24 05:14	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		10/25/24 12:00	10/27/24 05:14	1
C8-C18	<26		26	ug/L		10/25/24 12:00	10/27/24 05:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	92		60 - 130			10/25/24 12:00	10/27/24 05:14	1

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-119107-2

Date Collected: 10/21/24 10:34

Matrix: Water

Date Received: 10/23/24 10:25

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			10/25/24 23:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		38 - 134				10/25/24 23:44	1

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)

Lab Sample ID: 380-119107-3

Date Collected: 10/21/24 10:59

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2,4'-DDD	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2,4'-DDE	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2,4'-DDT	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
2-Methylnaphthalene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
4,4'-DDD	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
4,4'-DDE	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
4,4'-DDT	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Acenaphthene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Acenaphthylene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Acetochlor	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Alachlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
alpha-BHC	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
alpha-Chlordane	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Anthracene	<0.019		0.019	ug/L		10/24/24 08:16	10/25/24 22:09	1
Atrazine	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/24/24 08:16	10/25/24 22:09	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/24/24 08:16	10/25/24 22:09	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/24/24 08:16	10/25/24 22:09	1
beta-BHC	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/24/24 08:16	10/25/24 22:09	1
Bromacil	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Butachlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/24/24 08:16	10/25/24 22:09	1
Chlorobenzilate	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Chloroneb	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Chlorpyrifos	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Chrysene	<0.019		0.019	ug/L		10/24/24 08:16	10/25/24 22:09	1
delta-BHC	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/24/24 08:16	10/25/24 22:09	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Dieldrin	<0.0096	^3+	0.0096	ug/L		10/24/24 08:16	10/25/24 22:09	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-119107-3

Date Collected: 10/21/24 10:59

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diethylphthalate	<0.48		0.48	ug/L		10/24/24 08:16	10/25/24 22:09	1
Dimethylphthalate	<0.48		0.48	ug/L		10/24/24 08:16	10/25/24 22:09	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		10/24/24 08:16	10/25/24 22:09	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Endosulfan sulfate	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Endrin	<0.0096		0.0096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Endrin aldehyde	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
EPTC	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Fluoranthene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Fluorene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
gamma-Chlordane	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Heptachlor	<0.0096	^3+	0.0096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Isophorone	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Lindane	<0.0096		0.0096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Malathion	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Methoxychlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Metolachlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Molinate	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Naphthalene	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Parathion	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Phenanthrene	<0.039		0.039	ug/L		10/24/24 08:16	10/25/24 22:09	1
Propachlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Pyrene	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Simazine	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Terbacil	<0.096	*+	0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Terbutylazine	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Thiobencarb	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/24/24 08:16	10/25/24 22:09	1
trans-Nonachlor	<0.048		0.048	ug/L		10/24/24 08:16	10/25/24 22:09	1
Trifluralin	<0.096		0.096	ug/L		10/24/24 08:16	10/25/24 22:09	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/24/24 08:16	10/25/24 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	10/24/24 08:16	10/25/24 22:09	1
Perylene-d12	87		70 - 130	10/24/24 08:16	10/25/24 22:09	1
Triphenylphosphate	102		70 - 130	10/24/24 08:16	10/25/24 22:09	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		10/28/24 12:16	11/04/24 17:52	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-119107-3

Date Collected: 10/21/24 10:59

Matrix: Drinking Water

Date Received: 10/23/24 10:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Acenaphthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Acenaphthylene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Benzo[a]anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Benzo[a]pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Chrysene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Fluoranthene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Fluorene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Naphthalene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Phenanthrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1
Pyrene	<0.19		0.19	ug/L		10/28/24 12:16	11/04/24 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	105		28 - 127	10/28/24 12:16	11/04/24 17:52	1
2-Fluorobiphenyl (Surr)	98		31 - 120	10/28/24 12:16	11/04/24 17:52	1
2-Fluorophenol (Surr)	51		17 - 120	10/28/24 12:16	11/04/24 17:52	1
Nitrobenzene-d5 (Surr)	95		27 - 120	10/28/24 12:16	11/04/24 17:52	1
Phenol-d6 (Surr)	30		10 - 120	10/28/24 12:16	11/04/24 17:52	1
p-Terphenyl-d14 (Surr)	108		45 - 120	10/28/24 12:16	11/04/24 17:52	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
Methylene Chloride	23	T J N	ug/L		2.00	75-09-2	10/28/24 12:16	11/05/24 11:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		33 - 139	10/28/24 12:16	11/05/24 11:00	1
2-Fluorobiphenyl (Surr)	96		33 - 126	10/28/24 12:16	11/05/24 11:00	1
2-Fluorophenol (Surr)	54		12 - 120	10/28/24 12:16	11/05/24 11:00	1
Nitrobenzene-d5 (Surr)	107		36 - 120	10/28/24 12:16	11/05/24 11:00	1
Phenol-d6 (Surr)	33		10 - 120	10/28/24 12:16	11/05/24 11:00	1
p-Terphenyl-d14 (Surr)	87		47 - 131	10/28/24 12:16	11/05/24 11:00	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			10/25/24 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		38 - 134		10/25/24 18:30	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		10/25/24 12:00	10/27/24 05:35	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		10/25/24 12:00	10/27/24 05:35	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-119107-1
 SDG: Weekly

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
 (331-203-TP400)**

Lab Sample ID: 380-119107-3

Date Collected: 10/21/24 10:59

Matrix: Drinking Water

Date Received: 10/23/24 10:25

Method: SW846 8015B - Diesel Range Organics (DRO) (GC) Low Level (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
C8-C18	<26		26	ug/L		10/25/24 12:00	10/27/24 05:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
<i>n</i> -Octacosane (Surr)	94		60 - 130			10/25/24 12:00	10/27/24 05:35	1

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)
 (331-203-TP400)**

Lab Sample ID: 380-119107-4

Date Collected: 10/21/24 10:59

Matrix: Water

Date Received: 10/23/24 10:25

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			10/26/24 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		38 - 134				10/26/24 00:07	1

Action Limit Summary

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

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	^3+	ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		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: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-119107-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0096		ug/L	2	0.0096	525.2	Total/NA
Heptachlor	<0.0096	^3+	ug/L	0.4	0.0096	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Methoxychlor	<0.048		ug/L	40	0.048	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-119107-1
SDG: Weekly

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

Matrix: Drinking 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)
380-119107-1	AIEA GULCH WELLS PUMP 2 (	98	88	104
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	98	87	102

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

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)
380-118944-B-3-A MS	Matrix Spike	98	90	108
380-118978-Q-1-A DU	Duplicate	97	86	105
LCS 380-115195/23-A	Lab Control Sample	96	91	107
LCSD 380-115195/24-A	Lab Control Sample Dup	95	90	108
MB 380-115195/21-A	Method Blank	95	80	101
MRL 380-115195/22-A	Lab Control Sample	95	85	103

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

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

Matrix: Drinking 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)
380-119107-1	AIEA GULCH WELLS PUMP 2 (	99	97	56	107	34	95
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	93	96	54	107	33	87

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 - 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)
MB 570-496453/1-A	Method Blank	98	94	63	107	38	98

Surrogate Summary

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

Job ID: 380-119107-1
SDG: Weekly

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: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

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)
380-119107-1	AIEA GULCH WELLS PUMP 2 (	102	100	50	94	32	121 S1+
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	105	98	51	95	30	108

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-119304-A-1-A MS	Matrix Spike	102	93	55	91	36	107
380-119304-A-1-B MSD	Matrix Spike Duplicate	101	92	55	76	36	104
LCS 570-496453/2-A	Lab Control Sample	104	98	64	78	42	112
LCSD 570-496453/3-A	Lab Control Sample Dup	99	96	63	77	41	110
MB 570-496453/1-A	Method Blank	109	96	63	95	39	117

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
		380-119107-1	AIEA GULCH WELLS PUMP 2 (	88
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	85

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

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

Job ID: 380-119107-1
 SDG: Weekly

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-118070-E-3 MS	Matrix Spike	95
380-118070-E-3 MSD	Matrix Spike Duplicate	95
380-119032-B-3 MS	Matrix Spike	91
380-119032-B-3 MSD	Matrix Spike Duplicate	92
380-119107-2	TB:AIEA GULCH WELLS P2 (331-202-TP072)	85
380 119107 4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	85
LCS 570-495570/1008	Lab Control Sample	94
LCSD 570-495570/9	Lab Control Sample Dup	95
MB 570-495570/10	Method Blank	88
MRL 570-495570/1003	Lab Control Sample	87

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-119107-1	AIEA GULCH WELLS PUMP 2 (	92
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	94

Surrogate Legend

OTCSN = n-Octacosane (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)
380-118933-B-1-A MS	Matrix Spike	89
380-118933-B-1-B MSD	Matrix Spike Duplicate	96
380-119032-C-3-A MS	Matrix Spike	94
380-119032-C-3-B MSD	Matrix Spike Duplicate	94
LCS 570-495652/2-A	Lab Control Sample	96
LCSD 570-495652/3-A	Lab Control Sample Dup	93
MB 570-495652/1-A	Method Blank	92
MRL 570-495652/4-A	Lab Control Sample	91

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MB 380-115195/21-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 115195

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2,4'-DDD	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2,4'-DDE	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2,4'-DDT	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
2-Methylnaphthalene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
4,4'-DDD	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
4,4'-DDE	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
4,4'-DDT	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Acenaphthene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Acenaphthylene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Acetochlor	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Alachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
alpha-BHC	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
alpha-Chlordane	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Anthracene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 15:25	1
Atrazine	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Benz(a)anthracene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Benzo[a]pyrene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 15:25	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 15:25	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 15:25	1
beta-BHC	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		10/24/24 08:16	10/25/24 15:25	1
Bromacil	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Butachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Butylbenzylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 15:25	1
Chlorobenzilate	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Chloroneb	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Chlorpyrifos	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Chrysene	<0.020		0.020	ug/L		10/24/24 08:16	10/25/24 15:25	1
delta-BHC	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		10/24/24 08:16	10/25/24 15:25	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Dieldrin	<0.0099	^3+	0.0099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Diethylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 15:25	1
Dimethylphthalate	<0.49		0.49	ug/L		10/24/24 08:16	10/25/24 15:25	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		10/24/24 08:16	10/25/24 15:25	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Endosulfan sulfate	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Endrin	<0.0099		0.0099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Endrin aldehyde	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
EPTC	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MB 380-115195/21-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 115195

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Fluorene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
gamma-Chlordane	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Heptachlor	<0.0099	^3+	0.0099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Hexachlorobenzene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Isophorone	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Lindane	<0.0099		0.0099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Malathion	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Methoxychlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Metolachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Molinate	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Naphthalene	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Parathion	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Phenanthrene	<0.040		0.040	ug/L		10/24/24 08:16	10/25/24 15:25	1
Propachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Pyrene	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Simazine	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Terbacil	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Terbutylazine	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Thiobencarb	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		10/24/24 08:16	10/25/24 15:25	1
trans-Nonachlor	<0.049		0.049	ug/L		10/24/24 08:16	10/25/24 15:25	1
Trifluralin	<0.099		0.099	ug/L		10/24/24 08:16	10/25/24 15:25	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.662	T J	ug/L		3.94	N/A	10/24/24 08:16	10/25/24 15:25	1
Unknown	0.527	T J	ug/L		4.58	N/A	10/24/24 08:16	10/25/24 15:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	10/24/24 08:16	10/25/24 15:25	1
Perylene-d12	80		70 - 130	10/24/24 08:16	10/25/24 15:25	1
Triphenylphosphate	101		70 - 130	10/24/24 08:16	10/25/24 15:25	1

Lab Sample ID: LCS 380-115195/23-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.99	1.98		ug/L		100	70 - 130
2,4'-DDD	1.99	2.25		ug/L		113	70 - 130
2,4'-DDE	1.99	2.15		ug/L		108	70 - 130
2,4'-DDT	1.99	2.05		ug/L		103	70 - 130
2,4-Dinitrotoluene	1.99	1.98		ug/L		100	70 - 130
2,6-Dinitrotoluene	1.99	1.96		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: LCS 380-115195/23-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	1.99	1.96		ug/L		99	70 - 130
4,4'-DDD	1.99	2.15		ug/L		108	70 - 130
4,4'-DDE	1.99	2.12		ug/L		106	70 - 130
4,4'-DDT	1.99	2.03		ug/L		102	70 - 130
Acenaphthene	1.99	2.05		ug/L		103	70 - 130
Acenaphthylene	1.99	1.96		ug/L		98	70 - 130
Acetochlor	1.99	2.27		ug/L		114	70 - 130
Alachlor	1.99	2.15		ug/L		108	70 - 130
alpha-BHC	1.99	2.10		ug/L		106	70 - 130
alpha-Chlordane	1.99	2.24		ug/L		113	70 - 130
Anthracene	1.99	1.92		ug/L		97	70 - 130
Atrazine	1.99	2.48		ug/L		125	70 - 130
Benz(a)anthracene	1.99	2.08		ug/L		105	70 - 130
Benzo[a]pyrene	1.99	2.11		ug/L		106	70 - 130
Benzo[b]fluoranthene	1.99	2.07		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.99	1.84		ug/L		93	70 - 130
Benzo[k]fluoranthene	1.99	2.06		ug/L		104	70 - 130
beta-BHC	1.99	2.17		ug/L		109	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.09		ug/L		105	70 - 130
Bromacil	1.99	2.28		ug/L		115	70 - 130
Butachlor	1.99	2.20		ug/L		111	70 - 130
Butylbenzylphthalate	1.99	2.24		ug/L		112	70 - 130
Chlorobenzilate	1.99	2.06		ug/L		104	70 - 130
Chloroneb	1.99	2.23		ug/L		112	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.21		ug/L		111	70 - 130
Chlorpyrifos	1.99	2.32		ug/L		117	70 - 130
Chrysene	1.99	2.13		ug/L		107	70 - 130
delta-BHC	1.99	2.12		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.21		ug/L		111	70 - 130
Dibenz(a,h)anthracene	1.99	1.96		ug/L		99	70 - 130
Diclorvos (DDVP)	1.99	1.95		ug/L		98	70 - 130
Dieldrin	1.99	2.14		ug/L		108	70 - 130
Diethylphthalate	1.99	2.24		ug/L		113	70 - 130
Dimethylphthalate	1.99	2.15		ug/L		108	70 - 130
Di-n-butyl phthalate	3.97	4.43		ug/L		112	70 - 130
Di-n-octyl phthalate	1.99	2.08		ug/L		104	70 - 130
Endosulfan I (Alpha)	1.99	2.11		ug/L		106	70 - 130
Endosulfan II (Beta)	1.99	2.16		ug/L		109	70 - 130
Endosulfan sulfate	1.99	2.06		ug/L		103	70 - 130
Endrin	1.99	2.36		ug/L		119	70 - 130
Endrin aldehyde	1.99	1.93		ug/L		97	60 - 130
EPTC	1.99	2.12		ug/L		107	70 - 130
Fluoranthene	1.99	2.29		ug/L		115	70 - 130
Fluorene	1.99	2.16		ug/L		109	70 - 130
gamma-Chlordane	1.99	2.19		ug/L		110	70 - 130
Heptachlor	1.99	2.24		ug/L		112	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.12		ug/L		107	70 - 130
Hexachlorobenzene	1.99	1.96		ug/L		99	70 - 130
Hexachlorocyclopentadiene	1.99	1.97		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: LCS 380-115195/23-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	1.99	2.00		ug/L		101	70 - 130
Isophorone	1.99	2.08		ug/L		105	70 - 130
Lindane	1.99	2.07		ug/L		104	70 - 130
Malathion	1.99	2.54		ug/L		128	70 - 130
Methoxychlor	1.99	2.19		ug/L		110	70 - 130
Metolachlor	1.99	2.34		ug/L		118	70 - 130
Molinate	1.99	2.16		ug/L		109	70 - 130
Naphthalene	1.99	1.96		ug/L		99	70 - 130
Parathion	1.99	2.31		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	1.99	2.14		ug/L		108	70 - 130
Phenanthrene	1.99	2.01		ug/L		101	70 - 130
Propachlor	1.99	2.26		ug/L		114	70 - 130
Pyrene	1.99	2.33		ug/L		117	70 - 130
Simazine	1.99	2.42		ug/L		122	70 - 130
Terbacil	1.99	2.57		ug/L		129	70 - 130
Terbutylazine	1.99	2.42		ug/L		122	70 - 130
Thiobencarb	1.99	2.29		ug/L		115	70 - 130
trans-Nonachlor	1.99	2.26		ug/L		114	70 - 130
Trifluralin	1.99	2.04		ug/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	91		70 - 130
Triphenylphosphate	107		70 - 130

Lab Sample ID: LCSD 380-115195/24-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130	0	20
2,4'-DDD	1.99	2.25		ug/L		113	70 - 130	0	20
2,4'-DDE	1.99	2.16		ug/L		109	70 - 130	1	20
2,4'-DDT	1.99	2.03		ug/L		102	70 - 130	1	20
2,4-Dinitrotoluene	1.99	2.04		ug/L		103	70 - 130	3	20
2,6-Dinitrotoluene	1.99	2.00		ug/L		100	70 - 130	2	20
2-Methylnaphthalene	1.99	1.95		ug/L		98	70 - 130	1	20
4,4'-DDD	1.99	2.15		ug/L		108	70 - 130	0	20
4,4'-DDE	1.99	2.11		ug/L		106	70 - 130	0	20
4,4'-DDT	1.99	2.00		ug/L		101	70 - 130	1	20
Acenaphthene	1.99	2.04		ug/L		103	70 - 130	0	20
Acenaphthylene	1.99	2.04		ug/L		103	70 - 130	4	20
Acetochlor	1.99	2.29		ug/L		115	70 - 130	1	20
Alachlor	1.99	2.18		ug/L		110	70 - 130	1	20
alpha-BHC	1.99	2.13		ug/L		107	70 - 130	1	20
alpha-Chlordane	1.99	2.30		ug/L		116	70 - 130	2	20
Anthracene	1.99	1.98		ug/L		99	70 - 130	3	20
Atrazine	1.99	2.49		ug/L		125	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-115195/24-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Benz(a)anthracene	1.99	2.07		ug/L		104	70 - 130	1	20	
Benzo[a]pyrene	1.99	2.10		ug/L		105	70 - 130	1	20	
Benzo[b]fluoranthene	1.99	2.11		ug/L		106	70 - 130	2	20	
Benzo[g,h,i]perylene	1.99	1.81		ug/L		91	70 - 130	2	20	
Benzo[k]fluoranthene	1.99	2.03		ug/L		102	70 - 130	1	20	
beta-BHC	1.99	2.12		ug/L		107	70 - 130	2	20	
Bis(2-ethylhexyl) phthalate	1.99	2.10		ug/L		105	70 - 130	0	20	
Bromacil	1.99	2.31		ug/L		116	70 - 130	1	20	
Butachlor	1.99	2.21		ug/L		111	70 - 130	1	20	
Butylbenzylphthalate	1.99	2.25		ug/L		113	70 - 130	0	20	
Chlorobenzilate	1.99	2.06		ug/L		104	70 - 130	0	20	
Chloroneb	1.99	2.28		ug/L		115	70 - 130	2	20	
Chlorothalonil (Draconil, Bravo)	1.99	2.28		ug/L		115	70 - 130	3	20	
Chlorpyrifos	1.99	2.38		ug/L		120	70 - 130	2	20	
Chrysene	1.99	2.13		ug/L		107	70 - 130	0	20	
delta-BHC	1.99	2.14		ug/L		108	70 - 130	1	20	
Di(2-ethylhexyl)adipate	1.99	2.22		ug/L		112	70 - 130	0	20	
Dibenz(a,h)anthracene	1.99	1.96		ug/L		98	70 - 130	0	20	
Diclorvos (DDVP)	1.99	2.02		ug/L		102	70 - 130	4	20	
Dieldrin	1.99	2.14		ug/L		108	70 - 130	0	20	
Diethylphthalate	1.99	2.23		ug/L		112	70 - 130	0	20	
Dimethylphthalate	1.99	2.18		ug/L		110	70 - 130	2	20	
Di-n-butyl phthalate	3.97	4.47		ug/L		112	70 - 130	1	20	
Di-n-octyl phthalate	1.99	2.05		ug/L		103	70 - 130	1	20	
Endosulfan I (Alpha)	1.99	2.07		ug/L		104	70 - 130	2	20	
Endosulfan II (Beta)	1.99	2.15		ug/L		108	70 - 130	1	20	
Endosulfan sulfate	1.99	2.06		ug/L		104	70 - 130	0	20	
Endrin	1.99	2.37		ug/L		119	70 - 130	0	20	
Endrin aldehyde	1.99	1.94		ug/L		98	60 - 130	1	20	
EPTC	1.99	2.17		ug/L		109	70 - 130	2	20	
Fluoranthene	1.99	2.30		ug/L		116	70 - 130	0	20	
Fluorene	1.99	2.17		ug/L		109	70 - 130	1	20	
gamma-Chlordane	1.99	2.22		ug/L		112	70 - 130	2	20	
Heptachlor	1.99	2.21		ug/L		111	70 - 130	1	20	
Heptachlor epoxide (isomer B)	1.99	2.12		ug/L		107	70 - 130	0	20	
Hexachlorobenzene	1.99	1.93		ug/L		97	70 - 130	1	20	
Hexachlorocyclopentadiene	1.99	1.99		ug/L		100	70 - 130	1	20	
Indeno[1,2,3-cd]pyrene	1.99	1.97		ug/L		99	70 - 130	1	20	
Isophorone	1.99	2.10		ug/L		106	70 - 130	1	20	
Lindane	1.99	2.06		ug/L		103	70 - 130	1	20	
Malathion	1.99	2.56		ug/L		129	70 - 130	1	20	
Methoxychlor	1.99	2.19		ug/L		110	70 - 130	0	20	
Metolachlor	1.99	2.38		ug/L		120	70 - 130	2	20	
Molinate	1.99	2.21		ug/L		111	70 - 130	2	20	
Naphthalene	1.99	1.95		ug/L		98	70 - 130	1	20	
Parathion	1.99	2.34		ug/L		118	70 - 130	1	20	
Pendimethalin (Penoxaline)	1.99	2.15		ug/L		108	70 - 130	0	20	
Phenanthrene	1.99	2.06		ug/L		104	70 - 130	2	20	
Propachlor	1.99	2.29		ug/L		115	70 - 130	1	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-115195/24-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene	1.99	2.34		ug/L		118	70 - 130	0	20
Simazine	1.99	2.40		ug/L		121	70 - 130	1	20
Terbacil	1.99	2.62	*+	ug/L		132	70 - 130	2	20
Terbutylazine	1.99	2.44		ug/L		123	70 - 130	1	20
Thiobencarb	1.99	2.31		ug/L		116	70 - 130	1	20
trans-Nonachlor	1.99	2.23		ug/L		112	70 - 130	1	20
Trifluralin	1.99	2.05		ug/L		103	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: MRL 380-115195/22-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0992	0.110		ug/L		111	50 - 150
2,4'-DDD	0.0992	0.103		ug/L		104	50 - 150
2,4'-DDE	0.0992	0.106		ug/L		107	50 - 150
2,4'-DDT	0.0992	0.116		ug/L		117	50 - 150
2,4-Dinitrotoluene	0.0992	0.112		ug/L		113	50 - 150
2,6-Dinitrotoluene	0.0992	0.106		ug/L		107	50 - 150
2-Methylnaphthalene	0.0992	0.103		ug/L		103	50 - 150
4,4'-DDD	0.0992	0.129		ug/L		130	50 - 150
4,4'-DDE	0.0992	0.102		ug/L		103	50 - 150
4,4'-DDT	0.0992	0.118		ug/L		119	50 - 150
Acenaphthene	0.0992	0.0994		ug/L		100	50 - 150
Acenaphthylene	0.0992	0.0977	J	ug/L		98	50 - 150
Acetochlor	0.0992	0.125		ug/L		126	50 - 150
Alachlor	0.0496	0.0630		ug/L		127	50 - 150
alpha-BHC	0.0992	0.113		ug/L		114	50 - 150
alpha-Chlordane	0.0248	0.0291	J	ug/L		117	50 - 150
Anthracene	0.0198	0.0229		ug/L		115	50 - 150
Atrazine	0.0496	0.0621		ug/L		125	50 - 150
Benz(a)anthracene	0.0496	0.0563		ug/L		113	50 - 150
Benzo[a]pyrene	0.0198	0.0272		ug/L		137	50 - 150
Benzo[b]fluoranthene	0.0198	0.0247		ug/L		124	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0545		ug/L		110	50 - 150
Benzo[k]fluoranthene	0.0198	0.0290		ug/L		146	50 - 150
beta-BHC	0.0992	0.119		ug/L		120	50 - 150
Bis(2-ethylhexyl) phthalate	0.595	0.581	J	ug/L		98	50 - 150
Bromacil	0.0992	0.130		ug/L		131	50 - 150
Butachlor	0.0496	0.0663		ug/L		134	50 - 150
Butylbenzylphthalate	0.496	0.570		ug/L		115	50 - 150
Chlorobenzilate	0.0992	0.109		ug/L		109	50 - 150
Chloroneb	0.0992	0.0921	J	ug/L		93	50 - 150

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MRL 380-115195/22-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorothalonil (Draconil, Bravo)	0.0992	0.115		ug/L		116	50 - 150
Chlorpyrifos	0.0496	0.0615		ug/L		124	50 - 150
Chrysene	0.0198	0.0238		ug/L		120	50 - 150
delta-BHC	0.0992	0.127		ug/L		128	50 - 150
Di(2-ethylhexyl)adipate	0.595	0.644		ug/L		108	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0503		ug/L		101	50 - 150
Diclorvos (DDVP)	0.0496	0.0545		ug/L		110	50 - 150
Dieldrin	0.00992	0.0207	^3+	ug/L		209	50 - 150
Diethylphthalate	0.496	0.549		ug/L		111	50 - 150
Dimethylphthalate	0.496	0.538		ug/L		108	50 - 150
Di-n-butyl phthalate	0.496	0.549	J	ug/L		111	49 - 243
Di-n-octyl phthalate	0.0992	0.122		ug/L		123	50 - 150
Endosulfan I (Alpha)	0.0992	0.0983	J	ug/L		99	50 - 150
Endosulfan II (Beta)	0.0992	0.121		ug/L		122	50 - 150
Endosulfan sulfate	0.0992	0.130		ug/L		131	50 - 150
Endrin	0.00992	0.0145		ug/L		146	50 - 150
Endrin aldehyde	0.0992	0.136		ug/L		137	50 - 150
EPTC	0.0992	0.101		ug/L		102	50 - 150
Fluoranthene	0.0992	0.110		ug/L		111	50 - 150
Fluorene	0.0496	0.0525		ug/L		106	50 - 150
gamma-Chlordane	0.0248	0.0257	J	ug/L		104	50 - 150
Heptachlor	0.00992	0.0165	^3+	ug/L		166	50 - 150
Heptachlor epoxide (isomer B)	0.00992	0.0121		ug/L		122	50 - 150
Hexachlorobenzene	0.0496	0.0457	J	ug/L		92	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0413	J	ug/L		83	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0552		ug/L		111	50 - 150
Isophorone	0.0992	0.121		ug/L		122	50 - 150
Lindane	0.00992	0.0123		ug/L		124	50 - 150
Malathion	0.0992	0.111		ug/L		112	50 - 150
Methoxychlor	0.0496	0.0672		ug/L		135	50 - 150
Metolachlor	0.0496	0.0648		ug/L		131	50 - 150
Molinate	0.0992	0.108		ug/L		109	50 - 150
Naphthalene	0.0992	0.103		ug/L		104	50 - 150
Parathion	0.0992	0.108		ug/L		109	50 - 150
Pendimethalin (Penoxaline)	0.0992	0.110		ug/L		111	50 - 150
Phenanthrene	0.0397	0.0463		ug/L		117	50 - 150
Propachlor	0.0496	0.0571		ug/L		115	50 - 150
Pyrene	0.0496	0.0564		ug/L		114	50 - 150
Simazine	0.0496	0.0530		ug/L		107	50 - 150
Terbacil	0.0992	0.112		ug/L		113	50 - 150
Terbutylazine	0.0992	0.115		ug/L		116	50 - 150
Thiobencarb	0.0992	0.110		ug/L		111	50 - 150
trans-Nonachlor	0.0248	0.0270	J	ug/L		109	50 - 150
Trifluralin	0.0992	0.106		ug/L		106	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	85		70 - 130

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MRL 380-115195/22-A
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 115195

Surrogate	%Recovery	MRL MRL Qualifier	Limits
Triphenylphosphate	103		70 - 130

Lab Sample ID: 380-118944-B-3-A MS
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	<0.097		1.97	1.96		ug/L		99	70 - 130
2,4'-DDD	<0.097		1.97	2.22		ug/L		113	70 - 130
2,4'-DDE	<0.097		1.97	2.12		ug/L		108	70 - 130
2,4'-DDT	<0.097		1.97	2.02		ug/L		103	70 - 130
2,4-Dinitrotoluene	<0.097		1.97	2.08		ug/L		106	70 - 130
2,6-Dinitrotoluene	<0.097		1.97	2.05		ug/L		104	70 - 130
2-Methylnaphthalene	<0.097		1.97	1.93		ug/L		98	70 - 130
4,4'-DDD	<0.097		1.97	2.13		ug/L		108	70 - 130
4,4'-DDE	<0.097		1.97	2.07		ug/L		105	70 - 130
4,4'-DDT	<0.097		1.97	2.02		ug/L		102	70 - 130
Acenaphthene	<0.097		1.97	2.00		ug/L		102	70 - 130
Acenaphthylene	<0.097		1.97	1.90		ug/L		97	70 - 130
Acetochlor	<0.097		1.97	2.28		ug/L		116	70 - 130
Alachlor	<0.049		1.97	2.16		ug/L		110	70 - 130
alpha-BHC	<0.097		1.97	2.08		ug/L		106	70 - 130
alpha-Chlordane	<0.049		1.97	2.24		ug/L		114	70 - 130
Anthracene	<0.019	F1	1.97	0.375	F1	ug/L		19	70 - 130
Atrazine	<0.049		1.97	2.40		ug/L		122	70 - 130
Benz(a)anthracene	<0.049		1.97	1.67		ug/L		85	70 - 130
Benzo[a]pyrene	<0.019		1.97	1.50		ug/L		76	70 - 130
Benzo[b]fluoranthene	<0.019		1.97	2.06		ug/L		105	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	1.81		ug/L		92	70 - 130
Benzo[k]fluoranthene	<0.019		1.97	2.02		ug/L		103	70 - 130
beta-BHC	<0.097		1.97	2.12		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.97	2.01		ug/L		102	70 - 130
Bromacil	<0.097		1.97	2.28		ug/L		116	70 - 130
Butachlor	<0.049		1.97	2.19		ug/L		111	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.21		ug/L		112	70 - 130
Chlorobenzilate	<0.097		1.97	2.04		ug/L		104	70 - 130
Chloroneb	<0.097		1.97	2.13		ug/L		108	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.97	2.30		ug/L		117	70 - 130
Chlorpyrifos	<0.049		1.97	2.43		ug/L		123	70 - 130
Chrysene	<0.019		1.97	2.09		ug/L		106	70 - 130
delta-BHC	<0.097		1.97	2.09		ug/L		106	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.97	2.13		ug/L		108	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	1.92		ug/L		98	70 - 130
Diclorvos (DDVP)	<0.049		1.97	1.94		ug/L		99	70 - 130
Dieldrin	<0.0097	^3+	1.97	2.10		ug/L		107	70 - 130
Diethylphthalate	<0.49		1.97	2.19		ug/L		111	70 - 130
Dimethylphthalate	<0.49		1.97	2.13		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.97		3.93	4.38		ug/L		111	70 - 130

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-118944-B-3-A MS
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Di-n-octyl phthalate	<0.097		1.97	1.97		ug/L		100	70 - 130	
Endosulfan I (Alpha)	<0.097		1.97	2.08		ug/L		106	70 - 130	
Endosulfan II (Beta)	<0.097		1.97	2.12		ug/L		108	70 - 130	
Endosulfan sulfate	<0.097		1.97	2.07		ug/L		105	70 - 130	
Endrin	<0.0097		1.97	2.40		ug/L		122	70 - 130	
Endrin aldehyde	<0.097		1.97	1.90		ug/L		97	60 - 130	
EPTC	<0.097		1.97	2.10		ug/L		107	70 - 130	
Fluoranthene	<0.097		1.97	2.25		ug/L		115	70 - 130	
Fluorene	<0.049		1.97	2.14		ug/L		109	70 - 130	
gamma-Chlordane	<0.049		1.97	2.23		ug/L		114	70 - 130	
Heptachlor	<0.0097	^3+	1.97	2.26		ug/L		115	70 - 130	
Heptachlor epoxide (isomer B)	<0.0097		1.97	2.09		ug/L		106	70 - 130	
Hexachlorobenzene	<0.049		1.97	1.95		ug/L		99	70 - 130	
Hexachlorocyclopentadiene	<0.049		1.97	2.00		ug/L		101	70 - 130	
Indeno[1,2,3-cd]pyrene	<0.049		1.97	1.99		ug/L		101	70 - 130	
Isophorone	<0.097		1.97	2.08		ug/L		106	70 - 130	
Lindane	<0.0097		1.97	2.03		ug/L		103	70 - 130	
Malathion	<0.097		1.97	2.50		ug/L		127	70 - 130	
Methoxychlor	<0.049		1.97	2.22		ug/L		113	70 - 130	
Metolachlor	<0.049		1.97	2.35		ug/L		120	70 - 130	
Molinate	<0.097		1.97	2.14		ug/L		109	70 - 130	
Naphthalene	<0.097		1.97	1.96		ug/L		100	70 - 130	
Parathion	<0.097		1.97	2.34		ug/L		119	70 - 130	
Pendimethalin (Penoxaline)	<0.097		1.97	2.18		ug/L		111	70 - 130	
Phenanthrene	<0.039		1.97	1.98		ug/L		101	70 - 130	
Propachlor	<0.049		1.97	2.22		ug/L		113	70 - 130	
Pyrene	<0.049		1.97	2.20		ug/L		112	70 - 130	
Simazine	<0.049		1.97	2.31		ug/L		118	70 - 130	
Terbacil	<0.097	*+	1.97	2.50		ug/L		127	70 - 130	
Terbutylazine	<0.097		1.97	2.39		ug/L		121	70 - 130	
Thiobencarb	<0.097		1.97	2.27		ug/L		115	70 - 130	
trans-Nonachlor	<0.049		1.97	2.22		ug/L		113	70 - 130	
Trifluralin	<0.097		1.97	2.05		ug/L		104	70 - 130	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: 380-118978-Q-1-A DU
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	Limit
	Result	Qualifier	Result	Qualifier					
1-Methylnaphthalene	<0.097		<0.099		ug/L		NC	20	
2,4'-DDD	<0.097		<0.099		ug/L		NC	20	
2,4'-DDE	<0.097		<0.099		ug/L		NC	20	
2,4'-DDT	<0.097		<0.099		ug/L		NC	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-118978-Q-1-A DU
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,4-Dinitrotoluene	<0.097		<0.099		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.099		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.099		ug/L		NC	20
4,4'-DDD	<0.097		<0.099		ug/L		NC	20
4,4'-DDE	<0.097		<0.099		ug/L		NC	20
4,4'-DDT	<0.097		<0.099		ug/L		NC	20
Acenaphthene	<0.097		<0.099		ug/L		NC	20
Acenaphthylene	<0.097		<0.099		ug/L		NC	20
Acetochlor	<0.097		<0.099		ug/L		NC	20
Alachlor	<0.049		<0.050		ug/L		NC	20
alpha-BHC	<0.097		<0.099		ug/L		NC	20
alpha-Chlordane	<0.049		<0.050		ug/L		NC	20
Anthracene	<0.019		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.050		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.050		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.050		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.020		ug/L		NC	20
beta-BHC	<0.097		<0.099		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.59		ug/L		NC	20
Bromacil	<0.097		<0.099		ug/L		NC	20
Butachlor	<0.049		<0.050		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.50		ug/L		NC	20
Chlorobenzilate	<0.097		<0.099		ug/L		NC	20
Chloroneb	<0.097		<0.099		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.099		ug/L		NC	20
Chlorpyrifos	<0.049		<0.050		ug/L		NC	20
Chrysene	<0.019		<0.020		ug/L		NC	20
delta-BHC	<0.097		<0.099		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.050		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.050		ug/L		NC	20
Dieldrin	<0.0097	^3+	<0.0099		ug/L		NC	20
Diethylphthalate	<0.49		<0.50		ug/L		NC	20
Dimethylphthalate	<0.49		<0.50		ug/L		NC	20
Di-n-butyl phthalate	<0.97		<0.99		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.099		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.099		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.099		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.099		ug/L		NC	20
Endrin	<0.0097		<0.0099		ug/L		NC	20
Endrin aldehyde	<0.097		<0.099		ug/L		NC	20
EPTC	<0.097		<0.099		ug/L		NC	20
Fluoranthene	<0.097		<0.099		ug/L		NC	20
Fluorene	<0.049		<0.050		ug/L		NC	20
gamma-Chlordane	<0.049		<0.050		ug/L		NC	20
Heptachlor	<0.0097	^3+	<0.0099		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0099		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-118978-Q-1-A DU
Matrix: Water
Analysis Batch: 115516

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 115195

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Hexachlorobenzene	<0.049		<0.050		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.050		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.050		ug/L		NC	20
Isophorone	<0.097		<0.099		ug/L		NC	20
Lindane	<0.0097		<0.0099		ug/L		NC	20
Malathion	<0.097		<0.099		ug/L		NC	20
Methoxychlor	<0.049		<0.050		ug/L		NC	20
Metolachlor	<0.049		<0.050		ug/L		NC	20
Molinate	<0.097		<0.099		ug/L		NC	20
Naphthalene	<0.097		<0.099		ug/L		NC	20
Parathion	<0.097		<0.099		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097		<0.099		ug/L		NC	20
Phenanthrene	<0.039		<0.040		ug/L		NC	20
Propachlor	<0.049		<0.050		ug/L		NC	20
Pyrene	<0.049		<0.050		ug/L		NC	20
Simazine	<0.049		<0.050		ug/L		NC	20
Terbacil	<0.097	*+	<0.099	*+	ug/L		NC	20
Terbutylazine	<0.097		<0.099		ug/L		NC	20
Thiobencarb	<0.097		<0.099		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.050		ug/L		NC	20
Trifluralin	<0.097		<0.099		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	86		70 - 130
Triphenylphosphate	105		70 - 130

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

Lab Sample ID: MB 570-496453/1-A
Matrix: Water
Analysis Batch: 499435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496453

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	10/28/24 12:16	11/05/24 10:12	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	98		33 - 139	10/28/24 12:16	11/05/24 10:12	1
2-Fluorobiphenyl (Surr)	94		33 - 126	10/28/24 12:16	11/05/24 10:12	1
2-Fluorophenol (Surr)	63		12 - 120	10/28/24 12:16	11/05/24 10:12	1
Nitrobenzene-d5 (Surr)	107		36 - 120	10/28/24 12:16	11/05/24 10:12	1
Phenol-d6 (Surr)	38		10 - 120	10/28/24 12:16	11/05/24 10:12	1
p-Terphenyl-d14 (Surr)	98		47 - 131	10/28/24 12:16	11/05/24 10:12	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MB 570-496453/1-A
Matrix: Water
Analysis Batch: 498190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 496453

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Acenaphthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Acenaphthylene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Chrysene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Fluorene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Naphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Phenanthrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	109		28 - 127	10/28/24 12:16	11/01/24 10:13	1
2-Fluorobiphenyl (Surr)	96		31 - 120	10/28/24 12:16	11/01/24 10:13	1
2-Fluorophenol (Surr)	63		17 - 120	10/28/24 12:16	11/01/24 10:13	1
Nitrobenzene-d5 (Surr)	95		27 - 120	10/28/24 12:16	11/01/24 10:13	1
Phenol-d6 (Surr)	39		10 - 120	10/28/24 12:16	11/01/24 10:13	1
p-Terphenyl-d14 (Surr)	117		45 - 120	10/28/24 12:16	11/01/24 10:13	1

Lab Sample ID: LCS 570-496453/2-A
Matrix: Water
Analysis Batch: 498190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	20.0	16.0		ug/L		80	47 - 120
2-Methylnaphthalene	20.0	18.3		ug/L		91	43 - 120
Acenaphthene	20.0	19.7		ug/L		99	60 - 132
Acenaphthylene	20.0	19.5		ug/L		97	54 - 126
Anthracene	20.0	23.2		ug/L		116	43 - 120
Benzo[a]anthracene	20.0	22.4		ug/L		112	42 - 133
Benzo[a]pyrene	20.0	22.8		ug/L		114	32 - 148
Benzo[b]fluoranthene	20.0	23.0		ug/L		115	42 - 140
Benzo[g,h,i]perylene	20.0	21.4		ug/L		107	1 - 195
Benzo[k]fluoranthene	20.0	23.3		ug/L		117	25 - 146
Chrysene	20.0	21.8		ug/L		109	44 - 140
Dibenz(a,h)anthracene	20.0	23.5		ug/L		117	1 - 200
Fluoranthene	20.0	23.7		ug/L		118	43 - 121
Fluorene	20.0	20.5		ug/L		102	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	22.9		ug/L		115	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: 380-119107-1
SDG: Weekly

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

Lab Sample ID: LCS 570-496453/2-A
Matrix: Water
Analysis Batch: 498190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	22.8		ug/L		114	65 - 120
Pyrene	20.0	23.3		ug/L		116	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	104		28 - 127
2-Fluorobiphenyl (Surr)	98		31 - 120
2-Fluorophenol (Surr)	64		17 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120
Phenol-d6 (Surr)	42		10 - 120
p-Terphenyl-d14 (Surr)	112		45 - 120

Lab Sample ID: LCSD 570-496453/3-A
Matrix: Water
Analysis Batch: 498190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	15.5		ug/L		78	47 - 120	3	20
2-Methylnaphthalene	20.0	17.7		ug/L		89	43 - 120	3	20
Acenaphthene	20.0	19.6		ug/L		98	60 - 132	0	29
Acenaphthylene	20.0	19.5		ug/L		97	54 - 126	0	45
Anthracene	20.0	22.5		ug/L		113	43 - 120	3	40
Benzo[a]anthracene	20.0	21.9		ug/L		109	42 - 133	2	32
Benzo[a]pyrene	20.0	22.1		ug/L		111	32 - 148	3	43
Benzo[b]fluoranthene	20.0	22.9		ug/L		114	42 - 140	1	43
Benzo[g,h,i]perylene	20.0	21.1		ug/L		105	1 - 195	2	61
Benzo[k]fluoranthene	20.0	22.7		ug/L		114	25 - 146	3	38
Chrysene	20.0	21.1		ug/L		106	44 - 140	3	53
Dibenz(a,h)anthracene	20.0	22.8		ug/L		114	1 - 200	3	75
Fluoranthene	20.0	22.6		ug/L		113	43 - 121	5	40
Fluorene	20.0	20.3		ug/L		102	70 - 120	1	23
Indeno[1,2,3-cd]pyrene	20.0	22.2		ug/L		111	1 - 151	3	60
Naphthalene	20.0	15.4		ug/L		77	36 - 120	3	39
Phenanthrene	20.0	21.9		ug/L		109	65 - 120	4	24
Pyrene	20.0	23.2		ug/L		116	70 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	99		28 - 127
2-Fluorobiphenyl (Surr)	96		31 - 120
2-Fluorophenol (Surr)	63		17 - 120
Nitrobenzene-d5 (Surr)	77		27 - 120
Phenol-d6 (Surr)	41		10 - 120
p-Terphenyl-d14 (Surr)	110		45 - 120

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-119304-A-1-A MS
Matrix: Water
Analysis Batch: 499085

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	<0.19		19.4	17.6		ug/L		91	36 - 120
2-Methylnaphthalene	<0.19		19.4	19.7		ug/L		101	32 - 124
Acenaphthene	<0.19		19.4	18.4		ug/L		95	47 - 145
Acenaphthylene	<0.19		19.4	17.5		ug/L		90	33 - 145
Anthracene	<0.19		19.4	20.5		ug/L		105	27 - 133
Benzo[a]anthracene	<0.19		19.4	20.4		ug/L		105	33 - 143
Benzo[a]pyrene	<0.19		19.4	17.6		ug/L		90	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	20.4		ug/L		105	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	25.4		ug/L		130	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	20.7		ug/L		106	11 - 162
Chrysene	<0.19		19.4	20.5		ug/L		105	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	28.8		ug/L		148	1 - 227
Fluoranthene	<0.19		19.4	21.5		ug/L		110	26 - 137
Fluorene	<0.19		19.4	19.4		ug/L		100	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	27.0		ug/L		139	1 - 171
Naphthalene	<0.19		19.4	17.1		ug/L		88	21 - 133
Phenanthrene	<0.19		19.4	20.7		ug/L		106	54 - 120
Pyrene	<0.19		19.4	21.4		ug/L		110	52 - 120

Surrogate	%Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol (Surr)	102		28 - 127
2-Fluorobiphenyl (Surr)	93		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	91		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	107		45 - 120

Lab Sample ID: 380-119304-A-1-B MSD
Matrix: Water
Analysis Batch: 499085

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	<0.19		19.2	14.8		ug/L		77	36 - 120	17	30
2-Methylnaphthalene	<0.19		19.2	17.2		ug/L		90	32 - 124	14	30
Acenaphthene	<0.19		19.2	18.2		ug/L		95	47 - 145	1	48
Acenaphthylene	<0.19		19.2	18.1		ug/L		95	33 - 145	4	74
Anthracene	<0.19		19.2	21.3		ug/L		111	27 - 133	3	66
Benzo[a]anthracene	<0.19		19.2	20.0		ug/L		104	33 - 143	2	53
Benzo[a]pyrene	<0.19		19.2	19.7		ug/L		102	17 - 163	11	72
Benzo[b]fluoranthene	<0.19		19.2	20.0		ug/L		104	24 - 159	2	71
Benzo[g,h,i]perylene	<0.19		19.2	20.4		ug/L		106	1 - 219	22	97
Benzo[k]fluoranthene	<0.19		19.2	20.9		ug/L		109	11 - 162	1	63
Chrysene	<0.19		19.2	19.9		ug/L		103	17 - 168	3	87
Dibenz(a,h)anthracene	<0.19		19.2	21.9		ug/L		114	1 - 227	27	126
Fluoranthene	<0.19		19.2	21.0		ug/L		109	26 - 137	2	66
Fluorene	<0.19		19.2	18.8		ug/L		98	59 - 121	3	38
Indeno[1,2,3-cd]pyrene	<0.19		19.2	20.7		ug/L		108	1 - 171	26	99
Naphthalene	<0.19		19.2	14.6		ug/L		76	21 - 133	16	65

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-119304-A-1-B MSD
Matrix: Water
Analysis Batch: 499085

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 496453

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.2	20.5		ug/L		107	54 - 120	1	39
Pyrene	<0.19		19.2	21.4		ug/L		111	52 - 120	0	49
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
2,4,6-Tribromophenol (Surr)	101		28 - 127								
2-Fluorobiphenyl (Surr)	92		31 - 120								
2-Fluorophenol (Surr)	55		17 - 120								
Nitrobenzene-d5 (Surr)	76		27 - 120								
Phenol-d6 (Surr)	36		10 - 120								
p-Terphenyl-d14 (Surr)	104		45 - 120								

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

Lab Sample ID: MB 570-495570/10
Matrix: Water
Analysis Batch: 495570

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			10/25/24 14:47	1
MB MB								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		38 - 134				10/25/24 14:47	1

Lab Sample ID: LCS 570-495570/1008
Matrix: Water
Analysis Batch: 495570

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	386		ug/L		97	78 - 120
LCS LCS							
Surrogate	%Recovery	Qualifier		Limits			
4-Bromofluorobenzene (Surr)	94			38 - 134			

Lab Sample ID: LCSD 570-495570/9
Matrix: Water
Analysis Batch: 495570

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	372		ug/L		93	78 - 120	4	10
LCSD LCSD									
Surrogate	%Recovery	Qualifier		Limits					
4-Bromofluorobenzene (Surr)	95			38 - 134					

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: MRL 570-495570/1003
Matrix: Water
Analysis Batch: 495570

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	10.4		ug/L		104	50 - 150
Surrogate	%Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	87		38 - 134				

Lab Sample ID: 380-118070-E-3 MS
Matrix: Water
Analysis Batch: 495570

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	384		ug/L		96	68 - 122
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	95		38 - 134						

Lab Sample ID: 380-118070-E-3 MSD
Matrix: Water
Analysis Batch: 495570

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	375		ug/L		94	68 - 122	2	18
Surrogate	%Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	95		38 - 134								

Lab Sample ID: 380-119032-B-3 MS
Matrix: Water
Analysis Batch: 495570

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	397		ug/L		99	68 - 122
Surrogate	%Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	91		38 - 134						

Lab Sample ID: 380-119032-B-3 MSD
Matrix: Water
Analysis Batch: 495570

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	391		ug/L		98	68 - 122	2	18

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-119032-B-3 MSD
Matrix: Water
Analysis Batch: 495570

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		38 - 134

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

Lab Sample ID: MB 570-495652/1-A
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 495652

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		10/25/24 12:00	10/27/24 01:24	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/25/24 12:00	10/27/24 01:24	1
C8-C18	<25		25	ug/L		10/25/24 12:00	10/27/24 01:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	92		60 - 130	10/25/24 12:00	10/27/24 01:24	1

Lab Sample ID: LCS 570-495652/2-A
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1380		ug/L		86	56 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane (Surr)	96		60 - 130

Lab Sample ID: LCSD 570-495652/3-A
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C10-C28	1600	1320		ug/L		83	56 - 127	4	23

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane (Surr)	93		60 - 130

Lab Sample ID: MRL 570-495652/4-A
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	<0.020		mg/L		95	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
n-Octacosane (Surr)	91		60 - 130

QC Sample Results

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

Job ID: 380-119107-1
SDG: Weekly

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

Lab Sample ID: 380-118933-B-1-A MS
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<28		1780	1470		ug/L		83	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
<i>n-Octacosane (Surr)</i>	89		60 - 130						

Lab Sample ID: 380-118933-B-1-B MSD
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<28		1760	1540		ug/L		87	70 - 130	4	20
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>n-Octacosane (Surr)</i>	96		60 - 130								

Lab Sample ID: 380-119032-C-3-A MS
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<26		1630	1460		ug/L		90	70 - 130
Surrogate	%Recovery	MS Qualifier	Limits						
<i>n-Octacosane (Surr)</i>	94		60 - 130						

Lab Sample ID: 380-119032-C-3-B MSD
Matrix: Water
Analysis Batch: 496076

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 495652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26		1620	1430		ug/L		88	70 - 130	2	20
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>n-Octacosane (Surr)</i>	94		60 - 130								

QC Association Summary

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

Job ID: 380-119107-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 115195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	525.2	
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	525.2	
MB 380-115195/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-115195/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-115195/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-115195/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-118944-B-3-A MS	Matrix Spike	Total/NA	Water	525.2	
380-118978-Q-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 115516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	525.2	115195
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	525.2	115195
MB 380-115195/21-A	Method Blank	Total/NA	Water	525.2	115195
LCS 380-115195/23-A	Lab Control Sample	Total/NA	Water	525.2	115195
LCSD 380-115195/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	115195
MRL 380-115195/22-A	Lab Control Sample	Total/NA	Water	525.2	115195
380-118944-B-3-A MS	Matrix Spike	Total/NA	Water	525.2	115195
380-118978-Q-1-A DU	Duplicate	Total/NA	Water	525.2	115195

Prep Batch: 496453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	625.1	
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	625.1	
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-496453/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-496453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-119304-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-119304-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 498190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1 SIM	496453
LCS 570-496453/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	496453
LCSD 570-496453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	496453

Analysis Batch: 499085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	625.1 SIM	496453
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	625.1 SIM	496453
380-119304-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	496453
380-119304-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	496453

Analysis Batch: 499435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	625.1	496453
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	625.1	496453
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1	496453

QC Association Summary

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

Job ID: 380-119107-1
 SDG: Weekly

GC VOA

Analysis Batch: 495570

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	8015B GRO LL	
380-119107-2	TB:AIEA GULCH WELLS P2 (331-202-TP072)	Total/NA	Water	8015B GRO LL	
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	8015B GRO LL	
380-119107-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TF	Total/NA	Water	8015B GRO LL	
MB 570-495570/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-495570/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-495570/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-495570/1003	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-118070-E-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-118070-E-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	
380-119032-B-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-119032-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 495652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	3510C	
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	3510C	
MB 570-495652/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-495652/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-495652/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-495652/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-118933-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-118933-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	
380-119032-C-3-A MS	Matrix Spike	Total/NA	Water	3510C	
380-119032-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 496076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Total/NA	Drinking Water	8015B	495652
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP	Total/NA	Drinking Water	8015B	495652
MB 570-495652/1-A	Method Blank	Total/NA	Water	8015B	495652
LCS 570-495652/2-A	Lab Control Sample	Total/NA	Water	8015B	495652
LCSD 570-495652/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	495652
MRL 570-495652/4-A	Lab Control Sample	Total/NA	Water	8015B	495652
380-118933-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	495652
380-118933-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	495652
380-119032-C-3-A MS	Matrix Spike	Total/NA	Water	8015B	495652
380-119032-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	495652

Lab Chronicle

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

Job ID: 380-119107-1
SDG: Weekly

**Client Sample ID: AIEA GULCH WELLS PUMP 2
(331-202-TP072)**

Lab Sample ID: 380-119107-1

Date Collected: 10/21/24 10:34

Matrix: Drinking Water

Date Received: 10/23/24 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			115195	KRD3	EA POM	10/24/24 08:16
Total/NA	Analysis	525.2		1	115516	UPAC	EA POM	10/25/24 21:49
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/28/24 12:16
Total/NA	Analysis	625.1		1	499435	CG	EET CAL 4	11/05/24 10:36
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/28/24 12:16
Total/NA	Analysis	625.1 SIM		1	499085	PQS1	EET CAL 4	11/04/24 17:30
Total/NA	Analysis	8015B GRO LL		1	495570	A9VE	EET CAL 4	10/25/24 18:07
Total/NA	Prep	3510C			495652	H6FE	EET CAL 4	10/25/24 12:00
Total/NA	Analysis	8015B		1	496076	E5RH	EET CAL 4	10/27/24 05:14

Client Sample ID: TB:AIEA GULCH WELLS P2 (331-202-TP072)

Lab Sample ID: 380-119107-2

Date Collected: 10/21/24 10:34

Matrix: Water

Date Received: 10/23/24 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	495570	A9VE	EET CAL 4	10/25/24 23:44

**Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(331-203-TP400)**

Lab Sample ID: 380-119107-3

Date Collected: 10/21/24 10:59

Matrix: Drinking Water

Date Received: 10/23/24 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			115195	KRD3	EA POM	10/24/24 08:16
Total/NA	Analysis	525.2		1	115516	UPAC	EA POM	10/25/24 22:09
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/28/24 12:16
Total/NA	Analysis	625.1		1	499435	CG	EET CAL 4	11/05/24 11:00
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/28/24 12:16
Total/NA	Analysis	625.1 SIM		1	499085	PQS1	EET CAL 4	11/04/24 17:52
Total/NA	Analysis	8015B GRO LL		1	495570	A9VE	EET CAL 4	10/25/24 18:30
Total/NA	Prep	3510C			495652	H6FE	EET CAL 4	10/25/24 12:00
Total/NA	Analysis	8015B		1	496076	E5RH	EET CAL 4	10/27/24 05:35

**Client Sample ID: TB: AIEA WELLS PUMPS 1&2 (260)
(331-203-TP400)**

Lab Sample ID: 380-119107-4

Date Collected: 10/21/24 10:59

Matrix: Water

Date Received: 10/23/24 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	495570	A9VE	EET CAL 4	10/26/24 00:07

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: 380-119107-1
 SDG: Weekly

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking 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
Arizona	State	AZ0830	11-15-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-24
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-119107-1
SDG: Weekly

Laboratory: Eurofins Calscience (Continued)

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

Authority	Program	Identification Number	Expiration Date
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	12-31-24

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

Method Summary

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

Job ID: 380-119107-1
SDG: Weekly

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

Protocol References:

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

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Sample Summary

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

Job ID: 380-119107-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-119107-1	AIEA GULCH WELLS PUMP 2 (331-202-TP072)	Drinking Water	10/21/24 10:34	10/23/24 10:25
380-119107-2	TB:AIEA GULCH WELLS P2 (331-202-TP072)	Water	10/21/24 10:34	10/23/24 10:25
380-119107-3	AIEA WELLS PUMPS 1&2 (260) P2 (331-203-TP400)	Drinking Water	10/21/24 10:59	10/23/24 10:25
380-119107-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	10/21/24 10:59	10/23/24 10:25

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

Chain of Custody Record

Client Information		Lab PM Arada, Rachelle	Carrier Tracking No(s)	COC No: 380-28005-2757 1									
Client Contact: Dr. Ron Fenstermacher		E-Mail Rachelle.Arada@et.eurofins.com	State of Origin:	Page: Page 1 of 1									
Company: City & County of Honolulu		PWSID:	Job #:										
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested	Analysis Requested										
City: Honolulu		TAT Requested (days):	Preservation Codes: R - NaThioSO4 RA - NaThio/HCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate										
State, Zip: HI, 96843		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Total Number of Containers										
Phone: 808-748-5091(Tel)		PO #: C20525101 exp 05312023	Other:										
Email: RFENSTEMACHER@hbws.org		WO #:	80-119107 COC										
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111	QR Code										
Site: Hawaii		SSOW#:	80-119107 COC										
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code	Matrix (W=water, S=solid, O=oil, T=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_GRO_LL (MOD) GRO	8015B_DRO_LL_CS - HNL Ranges C10-C24/C24-C36/C8-C18	525.2_PREC - (MOD) 525plus Plus TICs	537.1_DW_PREC - 537.1 Full List	53 - All Analytes	Special Instructions/Note:
Aiea Gulch Wells Pump 2	21-Oct-2024	1034	G		Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	3	2	2		
Aiea Gulch Wells Pump 2 (Matrix Spike)					Water								
Aiea Gulch Wells Pump 2 (Matrix Spike Duplicate)	21-Oct-2024	1034	G		Water			2					
TB: Aiea Gulch Wells Pump 2					Water								
Aiea Wells Pumps 1&2 (260)	21-Oct-2024	1059	G		Water			2	3	2	2		
Aiea Wells Pumps 1&2 (260) (Matrix Spike)					Water								
Aiea Wells Pumps 1&2 (Matrix Spike Duplicate)					Water								
TB: Aiea Wells Pumps 1&2 (260)	21-Oct-2024	1059			Water			2					
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested I, II, III, IV, Other (specify)													
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____													
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:													
Method of Shipment: FED EX Date/Time: 10/23/2024 10:25 Received by: G. BENNER Company: EECAP Received by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____													
Cooler Temperature(s) °C and Other Remarks: ① 2.5°-0.0°-2.5° GEL-FROZEN ② 2.5°-0.0°-2.1°													



Eurofins Eaton Analytical Pomona

941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)				Sampler: N/A			Lab PM: Arada, Rachele			Carrier Tracking No(s): N/A			COC No: 380-164037.1												
Client Contact: Shipping/Receiving				Phone: N/A			E-Mail: Rachele.Arada@et.eurofinsus.com			State of Origin: Hawaii			Page: Page 1 of 1												
Company: Eurofins Environment Testing Southwest,						Accreditations Required (See note): State - Hawaii						Job #: 380-119107-1													
Address: 2841 Dow Avenue, Suite 100,				Due Date Requested: 11/5/2024			Analysis Requested						Preservation Codes: Other: N/A												
City: Tustin				TAT Requested (days): N/A																					
State, Zip: CA, 92780				PO #: N/A																					
Phone: 714-895-5494(Tel)				WO #: N/A																					
Email: N/A				Project #: 38001111																					
Project Name: RED-HILL				SSOW#: N/A			Site: Honolulu BWS Sites																		
Sample Identification - Client ID (Lab ID)				Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		801BB_DRD_LL_CS0510C_LL HNL Ranges: C10-C24/C24-C36/C8-C18		801BB_GRO_LL05030C (MOD) GRO		625.1_SIM625_Prep (MOD) Extended PAH List		625.1/625_Prep (MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers	
								Preservation Code:														Special Instructions/Note:			
AIEA GULCH WELLS PUMP 2 (331-202-TP072) (380-119107-1)				10/21/24		10:34 Hawaiian		G Water		Water						X		X		X		X		7 MRLs are needed. Confirm any hits >RL.	
TB:AIEA GULCH WELLS P2 (331-202-TP072) (380-119107-2)				10/21/24		10:34 Hawaiian		G Water		Water								X						2 MRLs are needed.	
AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-119107-3)				10/21/24		10:59 Hawaiian		G Water		Water						X		X		X		X		7 MRLs are needed. Confirm any hits >RL.	
TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400) (380-119107-1)				10/21/24		10:59 Hawaiian		G Water		Water								X						2 MRLs are needed.	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)											
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months											
Deliverable Requested: I, II, III, IV, Other (specify)				Primary Deliverable Rank: 2		Special Instructions/QC Requirements:											
Empty Kit Relinquished by:			Date:			Time:			Method of Shipment:								
Relinquished by: <i>Xm</i>			Date/Time: 10/24/24 1210			Company: <i>EBA</i>			Received by: <i>[Signature]</i>			Date/Time: 10-24-24 1210			Company:		
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:			Company:		
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:			Company:		
Custody Seals Intact:			Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:											
Δ Yes Δ No						1-7 / 2-7 SC 14											



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-119107-1

SDG Number: Weekly

Login Number: 119107

List Number: 1

Creator: Gerfen, Chris

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").	N/A	
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: 380-119107-1

SDG Number: Weekly

Login Number: 119107

List Number: 2

Creator: Cortez Diaz, Antonio

List Source: Eurofins Calscience

List Creation: 10/24/24 09:09 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	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
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	2.7
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?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

