

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 1/10/2025 12:54:26 PM

JOB DESCRIPTION

RED-HILL
Weekly
RUSH Weekly Red Hill

JOB NUMBER

380-127864-1

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
1/10/2025 12:54:26 PM

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	11
Surrogate Summary	12
QC Sample Results	15
QC Association Summary	32
Lab Chronicle	34
Certification Summary	35
Method Summary	37
Sample Summary	38
Chain of Custody	39
Receipt Checklists	41

Definitions/Glossary

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

Job ID: 380-127864-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

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

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: 380-127864-1

Job ID: 380-127864-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-127864-1

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 12/27/2024 9:25 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 3.1°C, 3.9°C, 4.3°C and 5.1°C.

Receipt Exceptions

Bottles for 8015B have time as 1038 while the COC has time for 0938.

Logged time based on COC.

Halawa Shaft Viewing Pool (380-127864-1)

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 570-518391 and analytical batch 570-520017 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: 380-127864-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

No Detections.

Client Sample ID: TB Hawala Shaft Viewing Pool

Lab Sample ID: 380-127864-2

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: 380-127864-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

Date Collected: 12/24/24 09:38

Matrix: Drinking Water

Date Received: 12/27/24 09:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2,4'-DDD	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2,4'-DDE	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2,4'-DDT	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
2-Methylnaphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
4,4'-DDD	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
4,4'-DDE	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
4,4'-DDT	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Acenaphthene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Acenaphthylene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Acetochlor	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Alachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
alpha-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
alpha-Chlordane	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Anthracene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 17:34	1
Atrazine	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Benz(a)anthracene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Benzo[a]pyrene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 17:34	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 17:34	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 17:34	1
beta-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		12/29/24 11:48	12/30/24 17:34	1
Bromacil	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Butachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Butylbenzylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 17:34	1
Chlorobenzilate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Chloroneb	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Chlorpyrifos	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Chrysene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 17:34	1
delta-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		12/29/24 11:48	12/30/24 17:34	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Dieldrin	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Diethylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 17:34	1
Dimethylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 17:34	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		12/29/24 11:48	12/30/24 17:34	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Endosulfan sulfate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Endrin	<0.0097	^3+	0.0097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Endrin aldehyde	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
EPTC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Fluoranthene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

Date Collected: 12/24/24 09:38

Matrix: Drinking Water

Date Received: 12/27/24 09:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
gamma-Chlordane	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Heptachlor	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Hexachlorobenzene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Isophorone	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Lindane	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Malathion	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Methoxychlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Metolachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Molinate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Naphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Parathion	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Phenanthrene	<0.039		0.039	ug/L		12/29/24 11:48	12/30/24 17:34	1
Propachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Pyrene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Simazine	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Terbacil	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Terbutylazine	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Thiobencarb	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		12/29/24 11:48	12/30/24 17:34	1
trans-Nonachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 17:34	1
Trifluralin	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 17:34	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	12/29/24 11:48	12/30/24 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	12/29/24 11:48	12/30/24 17:34	1
Perylene-d12	94		70 - 130	12/29/24 11:48	12/30/24 17:34	1
Triphenylphosphate	101		70 - 130	12/29/24 11:48	12/30/24 17:34	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		12/28/24 09:27	01/08/25 12:47	1
2-Methylnaphthalene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Acenaphthene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Acenaphthylene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Anthracene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Benzo[a]anthracene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Benzo[a]pyrene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Chrysene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Fluoranthene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

Date Collected: 12/24/24 09:38

Matrix: Drinking Water

Date Received: 12/27/24 09:25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Naphthalene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Phenanthrene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1
Pyrene	<0.19		0.19	ug/L		12/28/24 09:27	01/08/25 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		28 - 127	12/28/24 09:27	01/08/25 12:47	1
2-Fluorobiphenyl (Surr)	80		31 - 120	12/28/24 09:27	01/08/25 12:47	1
2-Fluorophenol (Surr)	44		17 - 120	12/28/24 09:27	01/08/25 12:47	1
Nitrobenzene-d5 (Surr)	76		27 - 120	12/28/24 09:27	01/08/25 12:47	1
Phenol-d6 (Surr)	28		10 - 120	12/28/24 09:27	01/08/25 12:47	1
p-Terphenyl-d14 (Surr)	91		45 - 120	12/28/24 09:27	01/08/25 12:47	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	12/28/24 09:27	01/09/25 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	60		33 - 139	12/28/24 09:27	01/09/25 17:26	1
2-Fluorobiphenyl (Surr)	69		33 - 126	12/28/24 09:27	01/09/25 17:26	1
2-Fluorophenol (Surr)	39		12 - 120	12/28/24 09:27	01/09/25 17:26	1
Nitrobenzene-d5 (Surr)	55		36 - 120	12/28/24 09:27	01/09/25 17:26	1
Phenol-d6 (Surr)	22		10 - 120	12/28/24 09:27	01/09/25 17:26	1
p-Terphenyl-d14 (Surr)	82		47 - 131	12/28/24 09:27	01/09/25 17:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			01/03/25 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		01/03/25 19:49	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		12/27/24 19:52	01/03/25 20:52	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		12/27/24 19:52	01/03/25 20:52	1
C8-C18	<26		26	ug/L		12/27/24 19:52	01/03/25 20:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	102		60 - 130	12/27/24 19:52	01/03/25 20:52	1

Client Sample ID: TB Hawala Shaft Viewing Pool

Lab Sample ID: 380-127864-2

Date Collected: 12/24/24 09:38

Matrix: Water

Date Received: 12/27/24 09:25

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			01/03/25 15:38	1

Client Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

Client Sample ID: TB Hawala Shaft Viewing Pool

Lab Sample ID: 380-127864-2

Date Collected: 12/24/24 09:38

Matrix: Water

Date Received: 12/27/24 09:25

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
4-Bromofluorobenzene (Surr)	88		38 - 134		01/03/25 15:38	1

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

Action Limit Summary

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

Job ID: 380-127864-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

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	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0097	^3+	ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-127864-1
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)
380-127864-1	Halawa Shaft Viewing Pool	99	94	101

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)
410-201798-E-1-A MS	Matrix Spike	95	88	106
410-201798-E-1-B MSD	Matrix Spike Duplicate	98	94	106
LCS 380-125723/23-A	Lab Control Sample	98	93	108
LCS 380-125723/24-A	Lab Control Sample Dup	97	94	109
MB 380-125723/21-A	Method Blank	99	86	111
MRL 380-125723/22-A	Lab Control Sample	96	89	108

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)
380-127864-1	Halawa Shaft Viewing Pool	60	69	39	55	22	82

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

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 570-518483/1-A	Method Blank	65	71	37	57	21	68

Surrogate Legend
 TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)

Surrogate Summary

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

Job ID: 380-127864-1
 SDG: Weekly

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

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)
380-127864-1	Halawa Shaft Viewing Pool	73	80	44	76	28	91

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-127839-A-1-A MS	Matrix Spike	78	63	43	58	29	107
380-127839-A-1-B MSD	Matrix Spike Duplicate	74	64	45	66	30	98
LCS 570-518483/2-A	Lab Control Sample	76	72	55	66	38	103
LCS 570-518483/3-A	Lab Control Sample Dup	80	73	51	66	36	90
MB 570-518483/1-A	Method Blank	62	68	45	71	29	93

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-127864-1	Halawa Shaft Viewing Pool	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-127839-C-1 MS	Matrix Spike	93
380-127839-C-1 MSD	Matrix Spike Duplicate	95

Surrogate Summary

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

Job ID: 380-127864-1
 SDG: Weekly

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-127864-2	TB Hawala Shaft Viewing Pool	88
LCS 570-519912/4	Lab Control Sample	95
LCSD 570-519912/5	Lab Control Sample Dup	93
MB 570-519912/6	Method Blank	84
MRL 570-519912/3	Lab Control Sample	89

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)
380-127864-1	Halawa Shaft Viewing Pool	102

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)
380-127839-B-1-A MS	Matrix Spike	92
380-127839-B-1-B MSD	Matrix Spike Duplicate	102
LCS 570-518391/2-A	Lab Control Sample	105
LCSD 570-518391/3-A	Lab Control Sample Dup	104
MB 570-518391/1-A	Method Blank	101
MRL 570-518391/13-A	Lab Control Sample	101

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-127864-1
 SDG: Weekly

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

Lab Sample ID: MB 380-125723/21-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125723

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2,4'-DDD	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2,4'-DDE	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2,4'-DDT	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
2-Methylnaphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
4,4'-DDD	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
4,4'-DDE	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
4,4'-DDT	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Acenaphthene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Acenaphthylene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Acetochlor	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Alachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
alpha-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
alpha-Chlordane	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Anthracene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 13:52	1
Atrazine	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Benz(a)anthracene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Benzo[a]pyrene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 13:52	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 13:52	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 13:52	1
beta-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		12/29/24 11:48	12/30/24 13:52	1
Bromacil	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Butachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Butylbenzylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 13:52	1
Chlorobenzilate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Chloroneb	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Chlorpyrifos	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Chrysene	<0.019		0.019	ug/L		12/29/24 11:48	12/30/24 13:52	1
delta-BHC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		12/29/24 11:48	12/30/24 13:52	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Dieldrin	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Diethylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 13:52	1
Dimethylphthalate	<0.49		0.49	ug/L		12/29/24 11:48	12/30/24 13:52	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		12/29/24 11:48	12/30/24 13:52	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Endosulfan sulfate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Endrin	<0.0097	^3+	0.0097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Endrin aldehyde	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
EPTC	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: MB 380-125723/21-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125723

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Fluorene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
gamma-Chlordane	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Heptachlor	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Hexachlorobenzene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Isophorone	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Lindane	<0.0097		0.0097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Malathion	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Methoxychlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Metolachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Molinate	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Naphthalene	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Parathion	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Phenanthrene	<0.039		0.039	ug/L		12/29/24 11:48	12/30/24 13:52	1
Propachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Pyrene	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Simazine	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Terbacil	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Terbutylazine	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Thiobencarb	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		12/29/24 11:48	12/30/24 13:52	1
trans-Nonachlor	<0.049		0.049	ug/L		12/29/24 11:48	12/30/24 13:52	1
Trifluralin	<0.097		0.097	ug/L		12/29/24 11:48	12/30/24 13:52	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclopentasiloxane, decamethyl-	0.607	T J N	ug/L		3.26	541-02-6	12/29/24 11:48	12/30/24 13:52	1
9-Octadecenamide, (Z)-	2.93	T J N	ug/L		7.90	301-02-0	12/29/24 11:48	12/30/24 13:52	1
13-Docosenamide, (Z)-	0.954	T J N	ug/L		10.43	112-84-5	12/29/24 11:48	12/30/24 13:52	1
Unknown	0.598	T J	ug/L		10.64	N/A	12/29/24 11:48	12/30/24 13:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	12/29/24 11:48	12/30/24 13:52	1
Perylene-d12	86		70 - 130	12/29/24 11:48	12/30/24 13:52	1
Triphenylphosphate	111		70 - 130	12/29/24 11:48	12/30/24 13:52	1

Lab Sample ID: LCS 380-125723/23-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.94	1.90		ug/L		98	70 - 130
2,4'-DDD	1.94	2.01		ug/L		104	70 - 130
2,4'-DDE	1.94	1.97		ug/L		101	70 - 130
2,4'-DDT	1.94	1.88		ug/L		97	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCS 380-125723/23-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1.94	1.68		ug/L		86	70 - 130
2,6-Dinitrotoluene	1.94	1.76		ug/L		91	70 - 130
2-Methylnaphthalene	1.94	1.90		ug/L		98	70 - 130
4,4'-DDD	1.94	2.07		ug/L		106	70 - 130
4,4'-DDE	1.94	1.98		ug/L		102	70 - 130
4,4'-DDT	1.94	1.90		ug/L		98	70 - 130
Acenaphthene	1.94	1.84		ug/L		95	70 - 130
Acenaphthylene	1.94	1.89		ug/L		97	70 - 130
Acetochlor	1.94	2.14		ug/L		110	70 - 130
Alachlor	1.94	2.17		ug/L		112	70 - 130
alpha-BHC	1.94	1.93		ug/L		99	70 - 130
alpha-Chlordane	1.94	2.05		ug/L		105	70 - 130
Anthracene	1.94	1.82		ug/L		94	70 - 130
Atrazine	1.94	2.14		ug/L		110	70 - 130
Benz(a)anthracene	1.94	1.82		ug/L		94	70 - 130
Benzo[a]pyrene	1.94	1.75		ug/L		90	70 - 130
Benzo[b]fluoranthene	1.94	2.02		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.94	2.03		ug/L		105	70 - 130
Benzo[k]fluoranthene	1.94	1.97		ug/L		102	70 - 130
beta-BHC	1.94	1.92		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	1.94	2.27		ug/L		117	70 - 130
Bromacil	1.94	2.07		ug/L		107	70 - 130
Butachlor	1.94	2.26		ug/L		116	70 - 130
Butylbenzylphthalate	1.94	2.41		ug/L		124	70 - 130
Chlorobenzilate	1.94	1.93		ug/L		100	70 - 130
Chloroneb	1.94	1.89		ug/L		97	70 - 130
Chlorothalonil (Draconil, Bravo)	1.94	1.89		ug/L		97	70 - 130
Chlorpyrifos	1.94	2.09		ug/L		108	70 - 130
Chrysene	1.94	1.86		ug/L		96	70 - 130
delta-BHC	1.94	1.95		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	1.94	2.21		ug/L		114	70 - 130
Dibenz(a,h)anthracene	1.94	1.86		ug/L		96	70 - 130
Diclorvos (DDVP)	1.94	2.04		ug/L		105	70 - 130
Dieldrin	1.94	1.88		ug/L		97	70 - 130
Diethylphthalate	1.94	2.09		ug/L		107	70 - 130
Dimethylphthalate	1.94	2.06		ug/L		106	70 - 130
Di-n-butyl phthalate	3.89	4.11		ug/L		106	70 - 130
Di-n-octyl phthalate	1.94	1.96		ug/L		101	70 - 130
Endosulfan I (Alpha)	1.94	1.95		ug/L		100	70 - 130
Endosulfan II (Beta)	1.94	1.93		ug/L		99	70 - 130
Endosulfan sulfate	1.94	1.93		ug/L		99	70 - 130
Endrin	1.94	1.94		ug/L		100	70 - 130
Endrin aldehyde	1.94	2.04		ug/L		105	60 - 130
EPTC	1.94	2.02		ug/L		104	70 - 130
Fluoranthene	1.94	2.00		ug/L		103	70 - 130
Fluorene	1.94	1.97		ug/L		101	70 - 130
gamma-Chlordane	1.94	2.04		ug/L		105	70 - 130
Heptachlor	1.94	1.95		ug/L		101	70 - 130
Heptachlor epoxide (isomer B)	1.94	2.00		ug/L		103	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCS 380-125723/23-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	1.94	1.74		ug/L		89	70 - 130
Hexachlorocyclopentadiene	1.94	1.67		ug/L		86	70 - 130
Indeno[1,2,3-cd]pyrene	1.94	2.02		ug/L		104	70 - 130
Isophorone	1.94	1.95		ug/L		100	70 - 130
Lindane	1.94	1.76		ug/L		91	70 - 130
Malathion	1.94	2.15		ug/L		111	70 - 130
Methoxychlor	1.94	1.83		ug/L		94	70 - 130
Metolachlor	1.94	2.13		ug/L		110	70 - 130
Molinate	1.94	2.06		ug/L		106	70 - 130
Naphthalene	1.94	1.90		ug/L		98	70 - 130
Parathion	1.94	1.93		ug/L		99	70 - 130
Pendimethalin (Penoxaline)	1.94	1.78		ug/L		92	70 - 130
Phenanthrene	1.94	1.83		ug/L		94	70 - 130
Propachlor	1.94	2.10		ug/L		108	70 - 130
Pyrene	1.94	1.99		ug/L		103	70 - 130
Simazine	1.94	2.08		ug/L		107	70 - 130
Terbacil	1.94	2.23		ug/L		115	70 - 130
Terbutylazine	1.94	2.09		ug/L		107	70 - 130
Thiobencarb	1.94	2.15		ug/L		111	70 - 130
trans-Nonachlor	1.94	1.99		ug/L		102	70 - 130
Trifluralin	1.94	1.69		ug/L		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: LCSD 380-125723/24-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.95	1.93		ug/L		99	70 - 130	2	20
2,4'-DDD	1.95	2.04		ug/L		105	70 - 130	2	20
2,4'-DDE	1.95	1.99		ug/L		102	70 - 130	1	20
2,4'-DDT	1.95	1.97		ug/L		101	70 - 130	5	20
2,4-Dinitrotoluene	1.95	1.90		ug/L		98	70 - 130	13	20
2,6-Dinitrotoluene	1.95	1.89		ug/L		97	70 - 130	7	20
2-Methylnaphthalene	1.95	1.91		ug/L		98	70 - 130	0	20
4,4'-DDD	1.95	2.09		ug/L		108	70 - 130	1	20
4,4'-DDE	1.95	2.06		ug/L		106	70 - 130	4	20
4,4'-DDT	1.95	2.01		ug/L		103	70 - 130	5	20
Acenaphthene	1.95	1.88		ug/L		97	70 - 130	2	20
Acenaphthylene	1.95	1.93		ug/L		99	70 - 130	2	20
Acetochlor	1.95	2.16		ug/L		111	70 - 130	1	20
Alachlor	1.95	2.14		ug/L		110	70 - 130	1	20
alpha-BHC	1.95	1.98		ug/L		102	70 - 130	3	20
alpha-Chlordane	1.95	2.10		ug/L		108	70 - 130	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-125723/24-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Anthracene	1.95	1.84		ug/L		94	70 - 130	1	20	
Atrazine	1.95	2.22		ug/L		114	70 - 130	4	20	
Benz(a)anthracene	1.95	1.85		ug/L		95	70 - 130	2	20	
Benzo[a]pyrene	1.95	1.83		ug/L		94	70 - 130	4	20	
Benzo[b]fluoranthene	1.95	2.08		ug/L		107	70 - 130	3	20	
Benzo[g,h,i]perylene	1.95	2.02		ug/L		104	70 - 130	1	20	
Benzo[k]fluoranthene	1.95	1.99		ug/L		102	70 - 130	1	20	
beta-BHC	1.95	1.98		ug/L		102	70 - 130	3	20	
Bis(2-ethylhexyl) phthalate	1.95	2.46		ug/L		126	70 - 130	8	20	
Bromacil	1.95	2.09		ug/L		107	70 - 130	1	20	
Butachlor	1.95	2.33		ug/L		120	70 - 130	3	20	
Butylbenzylphthalate	1.95	2.43		ug/L		125	70 - 130	1	20	
Chlorobenzilate	1.95	2.06		ug/L		106	70 - 130	6	20	
Chloroneb	1.95	1.93		ug/L		99	70 - 130	2	20	
Chlorothalonil (Draconil, Bravo)	1.95	1.93		ug/L		99	70 - 130	2	20	
Chlorpyrifos	1.95	2.16		ug/L		111	70 - 130	3	20	
Chrysene	1.95	1.89		ug/L		97	70 - 130	2	20	
delta-BHC	1.95	1.98		ug/L		102	70 - 130	2	20	
Di(2-ethylhexyl)adipate	1.95	2.32		ug/L		119	70 - 130	5	20	
Dibenz(a,h)anthracene	1.95	1.86		ug/L		95	70 - 130	0	20	
Diclorvos (DDVP)	1.95	2.09		ug/L		108	70 - 130	2	20	
Dieldrin	1.95	1.93		ug/L		99	70 - 130	3	20	
Diethylphthalate	1.95	2.17		ug/L		111	70 - 130	4	20	
Dimethylphthalate	1.95	2.11		ug/L		108	70 - 130	2	20	
Di-n-butyl phthalate	3.89	4.32		ug/L		111	70 - 130	5	20	
Di-n-octyl phthalate	1.95	2.16		ug/L		111	70 - 130	10	20	
Endosulfan I (Alpha)	1.95	1.94		ug/L		100	70 - 130	1	20	
Endosulfan II (Beta)	1.95	1.96		ug/L		101	70 - 130	2	20	
Endosulfan sulfate	1.95	2.01		ug/L		103	70 - 130	4	20	
Endrin	1.95	1.93		ug/L		99	70 - 130	0	20	
Endrin aldehyde	1.95	1.99		ug/L		102	60 - 130	3	20	
EPTC	1.95	2.10		ug/L		108	70 - 130	4	20	
Fluoranthene	1.95	2.02		ug/L		104	70 - 130	1	20	
Fluorene	1.95	2.00		ug/L		103	70 - 130	1	20	
gamma-Chlordane	1.95	2.08		ug/L		107	70 - 130	2	20	
Heptachlor	1.95	2.01		ug/L		104	70 - 130	3	20	
Heptachlor epoxide (isomer B)	1.95	2.02		ug/L		104	70 - 130	1	20	
Hexachlorobenzene	1.95	1.81		ug/L		93	70 - 130	4	20	
Hexachlorocyclopentadiene	1.95	1.79		ug/L		92	70 - 130	7	20	
Indeno[1,2,3-cd]pyrene	1.95	2.10		ug/L		108	70 - 130	4	20	
Isophorone	1.95	1.96		ug/L		101	70 - 130	1	20	
Lindane	1.95	1.80		ug/L		93	70 - 130	2	20	
Malathion	1.95	2.23		ug/L		114	70 - 130	3	20	
Methoxychlor	1.95	1.94		ug/L		100	70 - 130	6	20	
Metolachlor	1.95	2.17		ug/L		111	70 - 130	2	20	
Molinate	1.95	2.12		ug/L		109	70 - 130	3	20	
Naphthalene	1.95	1.89		ug/L		97	70 - 130	0	20	
Parathion	1.95	2.15		ug/L		110	70 - 130	11	20	
Pendimethalin (Penoxaline)	1.95	1.97		ug/L		101	70 - 130	10	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-125723/24-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	1.95	1.84		ug/L		95	70 - 130	1	20
Propachlor	1.95	2.17		ug/L		112	70 - 130	3	20
Pyrene	1.95	2.00		ug/L		103	70 - 130	0	20
Simazine	1.95	2.13		ug/L		110	70 - 130	2	20
Terbacil	1.95	2.26		ug/L		116	70 - 130	1	20
Terbutylazine	1.95	2.19		ug/L		113	70 - 130	5	20
Thiobencarb	1.95	2.22		ug/L		114	70 - 130	3	20
trans-Nonachlor	1.95	2.06		ug/L		106	70 - 130	3	20
Trifluralin	1.95	1.88		ug/L		97	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	109		70 - 130

Lab Sample ID: MRL 380-125723/22-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0973	0.108		ug/L		111	50 - 150
2,4'-DDD	0.0973	0.0957	J	ug/L		98	50 - 150
2,4'-DDE	0.0973	0.101		ug/L		104	50 - 150
2,4'-DDT	0.0973	0.0989		ug/L		102	50 - 150
2,4-Dinitrotoluene	0.0973	0.109		ug/L		112	50 - 150
2,6-Dinitrotoluene	0.0973	0.106		ug/L		109	50 - 150
2-Methylnaphthalene	0.0973	0.102		ug/L		105	50 - 150
4,4'-DDD	0.0973	0.115		ug/L		118	50 - 150
4,4'-DDE	0.0973	0.104		ug/L		107	50 - 150
4,4'-DDT	0.0973	0.0967	J	ug/L		99	50 - 150
Acenaphthene	0.0973	0.0927	J	ug/L		95	50 - 150
Acenaphthylene	0.0973	0.0954	J	ug/L		98	50 - 150
Acetochlor	0.0973	0.125		ug/L		129	50 - 150
Alachlor	0.0487	0.0532		ug/L		109	50 - 150
alpha-BHC	0.0973	0.107		ug/L		110	50 - 150
alpha-Chlordane	0.0243	<0.028		ug/L		109	50 - 150
Anthracene	0.0195	0.0205		ug/L		105	50 - 150
Atrazine	0.0487	0.0545		ug/L		112	50 - 150
Benz(a)anthracene	0.0487	0.0526		ug/L		108	50 - 150
Benzo[a]pyrene	0.0195	0.0207		ug/L		106	50 - 150
Benzo[b]fluoranthene	0.0195	0.0203		ug/L		104	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0438	J	ug/L		90	50 - 150
Benzo[k]fluoranthene	0.0195	0.0198		ug/L		102	50 - 150
beta-BHC	0.0973	0.123		ug/L		126	50 - 150
Bis(2-ethylhexyl) phthalate	0.584	0.653		ug/L		112	50 - 150
Bromacil	0.0973	0.119		ug/L		122	50 - 150
Butachlor	0.0487	0.0632		ug/L		130	50 - 150
Butylbenzylphthalate	0.487	0.616		ug/L		127	50 - 150

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: MRL 380-125723/22-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzilate	0.0973	0.113		ug/L		117	50 - 150
Chloroneb	0.0973	0.105		ug/L		108	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0973	0.0882	J	ug/L		91	50 - 150
Chlorpyrifos	0.0487	0.0487	J	ug/L		100	50 - 150
Chrysene	0.0195	0.0198		ug/L		102	50 - 150
delta-BHC	0.0973	0.107		ug/L		109	50 - 150
Di(2-ethylhexyl)adipate	0.584	0.697		ug/L		119	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0531		ug/L		109	50 - 150
Diclorvos (DDVP)	0.0487	0.0584		ug/L		120	50 - 150
Dieldrin	0.00973	0.0125		ug/L		128	50 - 150
Diethylphthalate	0.487	0.539		ug/L		111	50 - 150
Dimethylphthalate	0.487	0.531		ug/L		109	50 - 150
Di-n-butyl phthalate	0.487	0.644	J	ug/L		132	49 - 243
Di-n-octyl phthalate	0.0973	0.113		ug/L		116	50 - 150
Endosulfan I (Alpha)	0.0973	0.104		ug/L		107	50 - 150
Endosulfan II (Beta)	0.0973	0.127		ug/L		131	50 - 150
Endosulfan sulfate	0.0973	0.105		ug/L		108	50 - 150
Endrin	0.00973	0.0150	^3+	ug/L		154	50 - 150
Endrin aldehyde	0.0973	0.120		ug/L		124	50 - 150
EPTC	0.0973	0.0975		ug/L		100	50 - 150
Fluoranthene	0.0973	0.100		ug/L		103	50 - 150
Fluorene	0.0487	0.0506		ug/L		104	50 - 150
gamma-Chlordane	0.0243	0.0246	J	ug/L		101	50 - 150
Heptachlor	0.00973	0.0105		ug/L		107	50 - 150
Heptachlor epoxide (isomer B)	0.00973	0.0121		ug/L		125	50 - 150
Hexachlorobenzene	0.0487	0.0426	J	ug/L		87	50 - 150
Hexachlorocyclopentadiene	0.0487	<0.037		ug/L		73	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0449	J	ug/L		92	50 - 150
Isophorone	0.0973	0.114		ug/L		117	50 - 150
Lindane	0.00973	0.0138		ug/L		141	50 - 150
Malathion	0.0973	0.113		ug/L		116	50 - 150
Methoxychlor	0.0487	0.0541		ug/L		111	50 - 150
Metolachlor	0.0487	0.0603		ug/L		124	50 - 150
Molinate	0.0973	0.104		ug/L		107	50 - 150
Naphthalene	0.0973	0.118		ug/L		121	50 - 150
Parathion	0.0973	0.0904	J	ug/L		93	50 - 150
Pendimethalin (Penoxaline)	0.0973	0.0940	J	ug/L		97	50 - 150
Phenanthrene	0.0389	0.0418		ug/L		107	50 - 150
Propachlor	0.0487	0.0558		ug/L		115	50 - 150
Pyrene	0.0487	0.0509		ug/L		105	50 - 150
Simazine	0.0487	0.0579		ug/L		119	50 - 150
Terbacil	0.0973	0.118		ug/L		121	50 - 150
Terbutylazine	0.0973	0.112		ug/L		115	50 - 150
Thiobencarb	0.0973	0.107		ug/L		110	50 - 150
trans-Nonachlor	0.0243	<0.025		ug/L		98	50 - 150
Trifluralin	0.0973	0.0958	J	ug/L		98	50 - 150

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: MRL 380-125723/22-A
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125723

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	89		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: 410-201798-E-1-A MS
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	<0.097		1.96	1.92		ug/L		98	70 - 130
2,4'-DDD	<0.097		1.96	2.03		ug/L		104	70 - 130
2,4'-DDE	<0.097		1.96	2.00		ug/L		102	70 - 130
2,4'-DDT	<0.097		1.96	1.99		ug/L		102	70 - 130
2,4-Dinitrotoluene	<0.097		1.96	1.85		ug/L		95	70 - 130
2,6-Dinitrotoluene	<0.097		1.96	1.85		ug/L		95	70 - 130
2-Methylnaphthalene	<0.097		1.96	1.93		ug/L		98	70 - 130
4,4'-DDD	<0.097		1.96	2.09		ug/L		107	70 - 130
4,4'-DDE	<0.097		1.96	2.03		ug/L		104	70 - 130
4,4'-DDT	<0.097		1.96	2.05		ug/L		105	70 - 130
Acenaphthene	<0.097		1.96	1.86		ug/L		95	70 - 130
Acenaphthylene	<0.097		1.96	1.84		ug/L		94	70 - 130
Acetochlor	<0.097		1.96	2.13		ug/L		109	70 - 130
Alachlor	<0.049		1.96	2.13		ug/L		109	70 - 130
alpha-BHC	<0.097		1.96	2.00		ug/L		102	70 - 130
alpha-Chlordane	<0.049		1.96	2.07		ug/L		106	70 - 130
Anthracene	<0.019	F1 F2	1.96	0.126	F1	ug/L		6	70 - 130
Atrazine	<0.049		1.96	2.14		ug/L		109	70 - 130
Benz(a)anthracene	<0.049	F1	1.96	1.35	F1	ug/L		69	70 - 130
Benzo[a]pyrene	<0.019	F1 F2	1.96	0.978	F1	ug/L		50	70 - 130
Benzo[b]fluoranthene	<0.019		1.96	2.06		ug/L		105	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	1.88		ug/L		96	70 - 130
Benzo[k]fluoranthene	<0.019		1.96	1.99		ug/L		101	70 - 130
beta-BHC	<0.097		1.96	2.02		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58	F1	1.96	2.45		ug/L		125	70 - 130
Bromacil	<0.097		1.96	1.99		ug/L		102	70 - 130
Butachlor	<0.049		1.96	2.31		ug/L		118	70 - 130
Butylbenzylphthalate	<0.49		1.96	2.37		ug/L		121	70 - 130
Chlorobenzilate	<0.097		1.96	2.41		ug/L		123	70 - 130
Chloroneb	<0.097		1.96	1.93		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	1.89		ug/L		97	70 - 130
Chlorpyrifos	<0.049		1.96	2.17		ug/L		111	70 - 130
Chrysene	<0.019		1.96	1.86		ug/L		95	70 - 130
delta-BHC	<0.097		1.96	1.96		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.96	2.24		ug/L		114	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.73		ug/L		88	70 - 130
Diclorvos (DDVP)	<0.049		1.96	2.07		ug/L		106	70 - 130
Dieldrin	<0.0097		1.96	1.94		ug/L		99	70 - 130
Diethylphthalate	<0.49		1.96	2.18		ug/L		112	70 - 130

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: 410-201798-E-1-A MS
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Dimethylphthalate	<0.49		1.96	2.12		ug/L		108	70 - 130	
Di-n-butyl phthalate	<0.97		3.92	4.19		ug/L		107	70 - 130	
Di-n-octyl phthalate	<0.097		1.96	2.12		ug/L		108	70 - 130	
Endosulfan I (Alpha)	<0.097		1.96	1.96		ug/L		100	70 - 130	
Endosulfan II (Beta)	<0.097		1.96	1.99		ug/L		101	70 - 130	
Endosulfan sulfate	<0.097		1.96	1.95		ug/L		100	70 - 130	
Endrin	<0.0097	^3+	1.96	1.90		ug/L		97	70 - 130	
Endrin aldehyde	<0.097		1.96	1.73		ug/L		88	60 - 130	
EPTC	<0.097		1.96	2.09		ug/L		106	70 - 130	
Fluoranthene	<0.097		1.96	2.03		ug/L		104	70 - 130	
Fluorene	<0.049		1.96	2.05		ug/L		105	70 - 130	
gamma-Chlordane	<0.049		1.96	2.03		ug/L		104	70 - 130	
Heptachlor	<0.0097		1.96	1.97		ug/L		100	70 - 130	
Heptachlor epoxide (isomer B)	<0.0097		1.96	2.02		ug/L		103	70 - 130	
Hexachlorobenzene	<0.049		1.96	1.85		ug/L		95	70 - 130	
Hexachlorocyclopentadiene	<0.049		1.96	1.79		ug/L		91	70 - 130	
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.98		ug/L		101	70 - 130	
Isophorone	<0.097		1.96	1.94		ug/L		99	70 - 130	
Lindane	<0.0097		1.96	1.84		ug/L		94	70 - 130	
Malathion	<0.097		1.96	2.21		ug/L		113	70 - 130	
Methoxychlor	<0.049		1.96	1.98		ug/L		101	70 - 130	
Metolachlor	<0.049		1.96	2.13		ug/L		109	70 - 130	
Molinate	<0.097		1.96	2.14		ug/L		109	70 - 130	
Naphthalene	<0.097		1.96	1.90		ug/L		97	70 - 130	
Parathion	<0.097		1.96	2.10		ug/L		107	70 - 130	
Pendimethalin (Penoxaline)	<0.097		1.96	1.95		ug/L		100	70 - 130	
Phenanthrene	<0.039		1.96	1.86		ug/L		95	70 - 130	
Propachlor	<0.049		1.96	2.17		ug/L		111	70 - 130	
Pyrene	<0.049		1.96	1.91		ug/L		97	70 - 130	
Simazine	<0.049		1.96	2.04		ug/L		103	70 - 130	
Terbacil	<0.097		1.96	2.01		ug/L		103	70 - 130	
Terbutylazine	<0.097		1.96	2.13		ug/L		109	70 - 130	
Thiobencarb	<0.097		1.96	2.18		ug/L		111	70 - 130	
trans-Nonachlor	<0.049		1.96	2.03		ug/L		104	70 - 130	
Trifluralin	<0.097		1.96	1.93		ug/L		98	70 - 130	
				MS	MS					
Surrogate				%Recovery	Qualifier					Limits
2-Nitro-m-xylene				95						70 - 130
Perylene-d12				88						70 - 130
Triphenylphosphate				106						70 - 130

Lab Sample ID: 410-201798-E-1-B MSD
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1-Methylnaphthalene	<0.097		1.95	1.95		ug/L		99	70 - 130	1	20	
2,4'-DDD	<0.097		1.95	2.01		ug/L		103	70 - 130	1	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: 410-201798-E-1-B MSD
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,4'-DDE	<0.097		1.95	1.96		ug/L		100	70 - 130	2	20
2,4'-DDT	<0.097		1.95	1.97		ug/L		101	70 - 130	1	20
2,4-Dinitrotoluene	<0.097		1.95	1.97		ug/L		101	70 - 130	6	20
2,6-Dinitrotoluene	<0.097		1.95	1.99		ug/L		102	70 - 130	7	20
2-Methylnaphthalene	<0.097		1.95	1.95		ug/L		99	70 - 130	1	20
4,4'-DDD	<0.097		1.95	2.09		ug/L		107	70 - 130	0	20
4,4'-DDE	<0.097		1.95	2.03		ug/L		104	70 - 130	0	20
4,4'-DDT	<0.097		1.95	2.00		ug/L		103	70 - 130	2	20
Acenaphthene	<0.097		1.95	1.90		ug/L		97	70 - 130	2	20
Acenaphthylene	<0.097		1.95	1.95		ug/L		100	70 - 130	6	20
Acetochlor	<0.097		1.95	2.12		ug/L		109	70 - 130	0	20
Alachlor	<0.049		1.95	2.12		ug/L		108	70 - 130	1	20
alpha-BHC	<0.097		1.95	2.02		ug/L		103	70 - 130	1	20
alpha-Chlordane	<0.049		1.95	2.03		ug/L		104	70 - 130	2	20
Anthracene	<0.019	F1 F2	1.95	0.220	F1 F2	ug/L		11	70 - 130	54	20
Atrazine	<0.049		1.95	2.22		ug/L		113	70 - 130	4	20
Benz(a)anthracene	<0.049	F1	1.95	1.54		ug/L		79	70 - 130	13	20
Benzo[a]pyrene	<0.019	F1 F2	1.95	1.22	F1 F2	ug/L		62	70 - 130	22	20
Benzo[b]fluoranthene	<0.019		1.95	2.18		ug/L		111	70 - 130	5	20
Benzo[g,h,i]perylene	<0.049		1.95	2.07		ug/L		106	70 - 130	9	20
Benzo[k]fluoranthene	<0.019		1.95	2.02		ug/L		103	70 - 130	2	20
beta-BHC	<0.097		1.95	2.02		ug/L		103	70 - 130	0	20
Bis(2-ethylhexyl) phthalate	<0.58	F1	1.95	2.55	F1	ug/L		131	70 - 130	4	20
Bromacil	<0.097		1.95	2.14		ug/L		109	70 - 130	7	20
Butachlor	<0.049		1.95	2.28		ug/L		117	70 - 130	2	20
Butylbenzylphthalate	<0.49		1.95	2.33		ug/L		119	70 - 130	2	20
Chlorobenzilate	<0.097		1.95	2.42		ug/L		124	70 - 130	0	20
Chloroneb	<0.097		1.95	1.96		ug/L		100	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	<0.097		1.95	1.94		ug/L		99	70 - 130	3	20
Chlorpyrifos	<0.049		1.95	2.15		ug/L		110	70 - 130	1	20
Chrysene	<0.019		1.95	1.92		ug/L		98	70 - 130	3	20
delta-BHC	<0.097		1.95	1.94		ug/L		99	70 - 130	1	20
Di(2-ethylhexyl)adipate	<0.58		1.95	2.20		ug/L		113	70 - 130	2	20
Dibenz(a,h)anthracene	<0.049		1.95	1.88		ug/L		96	70 - 130	9	20
Diclorvos (DDVP)	<0.049		1.95	2.16		ug/L		111	70 - 130	4	20
Dieldrin	<0.0097		1.95	1.91		ug/L		98	70 - 130	1	20
Diethylphthalate	<0.49		1.95	2.19		ug/L		112	70 - 130	0	20
Dimethylphthalate	<0.49		1.95	2.17		ug/L		111	70 - 130	2	20
Di-n-butyl phthalate	<0.97		3.91	4.19		ug/L		107	70 - 130	0	20
Di-n-octyl phthalate	<0.097		1.95	2.06		ug/L		106	70 - 130	3	20
Endosulfan I (Alpha)	<0.097		1.95	1.88		ug/L		96	70 - 130	4	20
Endosulfan II (Beta)	<0.097		1.95	1.95		ug/L		100	70 - 130	2	20
Endosulfan sulfate	<0.097		1.95	1.95		ug/L		100	70 - 130	0	20
Endrin	<0.0097	^3+	1.95	1.92		ug/L		98	70 - 130	1	20
Endrin aldehyde	<0.097		1.95	1.64		ug/L		84	60 - 130	5	20
EPTC	<0.097		1.95	2.07		ug/L		106	70 - 130	1	20
Fluoranthene	<0.097		1.95	2.07		ug/L		106	70 - 130	2	20
Fluorene	<0.049		1.95	2.06		ug/L		105	70 - 130	0	20
gamma-Chlordane	<0.049		1.95	2.03		ug/L		104	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: 410-201798-E-1-B MSD
Matrix: Water
Analysis Batch: 125797

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 125723

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits	Limit	
Heptachlor	<0.0097		1.95	1.97		ug/L		101	70 - 130	0	20
Heptachlor epoxide (isomer B)	<0.0097		1.95	1.98		ug/L		102	70 - 130	2	20
Hexachlorobenzene	<0.049		1.95	1.86		ug/L		95	70 - 130	0	20
Hexachlorocyclopentadiene	<0.049		1.95	1.85		ug/L		95	70 - 130	3	20
Indeno[1,2,3-cd]pyrene	<0.049		1.95	2.20		ug/L		113	70 - 130	10	20
Isophorone	<0.097		1.95	2.01		ug/L		103	70 - 130	3	20
Lindane	<0.0097		1.95	1.83		ug/L		94	70 - 130	0	20
Malathion	<0.097		1.95	2.20		ug/L		113	70 - 130	0	20
Methoxychlor	<0.049		1.95	2.03		ug/L		104	70 - 130	2	20
Metolachlor	<0.049		1.95	2.10		ug/L		108	70 - 130	1	20
Molinate	<0.097		1.95	2.17		ug/L		111	70 - 130	1	20
Naphthalene	<0.097		1.95	1.92		ug/L		98	70 - 130	1	20
Parathion	<0.097		1.95	2.16		ug/L		111	70 - 130	3	20
Pendimethalin (Penoxaline)	<0.097		1.95	1.99		ug/L		102	70 - 130	2	20
Phenanthrene	<0.039		1.95	1.87		ug/L		96	70 - 130	0	20
Propachlor	<0.049		1.95	2.21		ug/L		113	70 - 130	2	20
Pyrene	<0.049		1.95	1.97		ug/L		101	70 - 130	3	20
Simazine	<0.049		1.95	2.17		ug/L		110	70 - 130	6	20
Terbacil	<0.097		1.95	2.24		ug/L		115	70 - 130	11	20
Terbutylazine	<0.097		1.95	2.19		ug/L		112	70 - 130	3	20
Thiobencarb	<0.097		1.95	2.19		ug/L		112	70 - 130	0	20
trans-Nonachlor	<0.049		1.95	1.98		ug/L		101	70 - 130	2	20
Trifluralin	<0.097		1.95	1.88		ug/L		96	70 - 130	2	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	106		70 - 130

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

Lab Sample ID: MB 570-518483/1-A
Matrix: Water
Analysis Batch: 521542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518483

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	12/28/24 09:26	01/09/25 14:59	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	65		33 - 139	12/28/24 09:26	01/09/25 14:59	1
2-Fluorobiphenyl (Surr)	71		33 - 126	12/28/24 09:26	01/09/25 14:59	1
2-Fluorophenol (Surr)	37		12 - 120	12/28/24 09:26	01/09/25 14:59	1
Nitrobenzene-d5 (Surr)	57		36 - 120	12/28/24 09:26	01/09/25 14:59	1
Phenol-d6 (Surr)	21		10 - 120	12/28/24 09:26	01/09/25 14:59	1
p-Terphenyl-d14 (Surr)	68		47 - 131	12/28/24 09:26	01/09/25 14:59	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: MB 570-518483/1-A
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518483

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
2-Methylnaphthalene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Acenaphthene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Acenaphthylene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Anthracene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Benzo[a]anthracene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Benzo[a]pyrene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Chrysene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Fluoranthene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Fluorene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Naphthalene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Phenanthrene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1
Pyrene	<0.20		0.20	ug/L		12/28/24 09:26	01/08/25 08:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	62		28 - 127	12/28/24 09:26	01/08/25 08:02	1
2-Fluorobiphenyl (Surr)	68		31 - 120	12/28/24 09:26	01/08/25 08:02	1
2-Fluorophenol (Surr)	45		17 - 120	12/28/24 09:26	01/08/25 08:02	1
Nitrobenzene-d5 (Surr)	71		27 - 120	12/28/24 09:26	01/08/25 08:02	1
Phenol-d6 (Surr)	29		10 - 120	12/28/24 09:26	01/08/25 08:02	1
p-Terphenyl-d14 (Surr)	93		45 - 120	12/28/24 09:26	01/08/25 08:02	1

Lab Sample ID: LCS 570-518483/2-A
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.5		ug/L		72	47 - 120
2-Methylnaphthalene	20.0	15.9		ug/L		80	43 - 120
Acenaphthene	20.0	15.6		ug/L		78	60 - 132
Acenaphthylene	20.0	14.6		ug/L		73	54 - 126
Anthracene	20.0	16.4		ug/L		82	43 - 120
Benzo[a]anthracene	20.0	17.8		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	14.2		ug/L		71	32 - 148
Benzo[b]fluoranthene	20.0	14.4		ug/L		72	42 - 140
Benzo[g,h,i]perylene	20.0	14.1		ug/L		71	1 - 195
Benzo[k]fluoranthene	20.0	14.0		ug/L		70	25 - 146
Chrysene	20.0	16.8		ug/L		84	44 - 140
Dibenz(a,h)anthracene	20.0	15.3		ug/L		76	1 - 200
Fluoranthene	20.0	16.1		ug/L		81	43 - 121
Fluorene	20.0	16.2		ug/L		81	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	15.5		ug/L		77	1 - 151
Naphthalene	20.0	13.1		ug/L		65	36 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCS 570-518483/2-A
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	15.7		ug/L		78	65 - 120
Pyrene	20.0	20.7		ug/L		104	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	76		28 - 127
2-Fluorobiphenyl (Surr)	72		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	38		10 - 120
p-Terphenyl-d14 (Surr)	103		45 - 120

Lab Sample ID: LCSD 570-518483/3-A
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 518483

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
1-Methylnaphthalene	20.0	15.4		ug/L		77	47 - 120	6	20
2-Methylnaphthalene	20.0	17.0		ug/L		85	43 - 120	6	20
Acenaphthene	20.0	16.5		ug/L		83	60 - 132	5	29
Acenaphthylene	20.0	14.8		ug/L		74	54 - 126	2	45
Anthracene	20.0	17.0		ug/L		85	43 - 120	4	40
Benzo[a]anthracene	20.0	18.3		ug/L		92	42 - 133	3	32
Benzo[a]pyrene	20.0	16.2		ug/L		81	32 - 148	13	43
Benzo[b]fluoranthene	20.0	16.9		ug/L		84	42 - 140	16	43
Benzo[g,h,i]perylene	20.0	12.7		ug/L		63	1 - 195	11	61
Benzo[k]fluoranthene	20.0	16.4		ug/L		82	25 - 146	15	38
Chrysene	20.0	17.5		ug/L		88	44 - 140	4	53
Dibenz(a,h)anthracene	20.0	14.2		ug/L		71	1 - 200	8	75
Fluoranthene	20.0	18.3		ug/L		91	43 - 121	13	40
Fluorene	20.0	17.0		ug/L		85	70 - 120	4	23
Indeno[1,2,3-cd]pyrene	20.0	14.2		ug/L		71	1 - 151	9	60
Naphthalene	20.0	13.5		ug/L		67	36 - 120	3	39
Phenanthrene	20.0	16.8		ug/L		84	65 - 120	7	24
Pyrene	20.0	18.7		ug/L		93	70 - 120	10	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	80		28 - 127
2-Fluorobiphenyl (Surr)	73		31 - 120
2-Fluorophenol (Surr)	51		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	90		45 - 120

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: 380-127839-A-1-A MS
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 518483

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	<0.19		19.3	12.5		ug/L		65	36 - 120
2-Methylnaphthalene	<0.19		19.3	13.8		ug/L		72	32 - 124
Acenaphthene	<0.19		19.3	13.3		ug/L		69	47 - 145
Acenaphthylene	<0.19		19.3	12.1		ug/L		63	33 - 145
Anthracene	<0.19		19.3	16.0		ug/L		83	27 - 133
Benzo[a]anthracene	<0.19		19.3	17.8		ug/L		92	33 - 143
Benzo[a]pyrene	<0.19		19.3	15.3		ug/L		79	17 - 163
Benzo[b]fluoranthene	<0.19		19.3	15.2		ug/L		79	24 - 159
Benzo[g,h,i]perylene	<0.19		19.3	14.8		ug/L		77	1 - 219
Benzo[k]fluoranthene	<0.19		19.3	15.1		ug/L		78	11 - 162
Chrysene	<0.19		19.3	16.6		ug/L		86	17 - 168
Dibenz(a,h)anthracene	<0.19		19.3	15.8		ug/L		82	1 - 227
Fluoranthene	<0.19		19.3	15.2		ug/L		78	26 - 137
Fluorene	<0.19		19.3	14.1		ug/L		73	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.3	16.1		ug/L		83	1 - 171
Naphthalene	<0.19		19.3	11.3		ug/L		58	21 - 133
Phenanthrene	<0.19		19.3	15.6		ug/L		80	54 - 120
Pyrene	<0.19		19.3	21.1		ug/L		109	52 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol (Surr)	78		28 - 127
2-Fluorobiphenyl (Surr)	63		31 - 120
2-Fluorophenol (Surr)	43		17 - 120
Nitrobenzene-d5 (Surr)	58		27 - 120
Phenol-d6 (Surr)	29		10 - 120
p-Terphenyl-d14 (Surr)	107		45 - 120

Lab Sample ID: 380-127839-A-1-B MSD
Matrix: Water
Analysis Batch: 521112

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 518483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	<0.19		19.5	14.8		ug/L		76	36 - 120	17	30
2-Methylnaphthalene	<0.19		19.5	16.2		ug/L		83	32 - 124	16	30
Acenaphthene	<0.19		19.5	13.8		ug/L		71	47 - 145	4	48
Acenaphthylene	<0.19		19.5	12.6		ug/L		65	33 - 145	4	74
Anthracene	<0.19		19.5	15.4		ug/L		79	27 - 133	4	66
Benzo[a]anthracene	<0.19		19.5	17.1		ug/L		87	33 - 143	4	53
Benzo[a]pyrene	<0.19		19.5	12.7		ug/L		65	17 - 163	18	72
Benzo[b]fluoranthene	<0.19		19.5	13.0		ug/L		67	24 - 159	16	71
Benzo[g,h,i]perylene	<0.19		19.5	13.8		ug/L		71	1 - 219	7	97
Benzo[k]fluoranthene	<0.19		19.5	13.3		ug/L		68	11 - 162	13	63
Chrysene	<0.19		19.5	15.9		ug/L		82	17 - 168	4	87
Dibenz(a,h)anthracene	<0.19		19.5	14.8		ug/L		76	1 - 227	7	126
Fluoranthene	<0.19		19.5	15.8		ug/L		81	26 - 137	4	66
Fluorene	<0.19		19.5	14.7		ug/L		75	59 - 121	4	38
Indeno[1,2,3-cd]pyrene	<0.19		19.5	15.1		ug/L		77	1 - 171	6	99
Naphthalene	<0.19		19.5	13.4		ug/L		69	21 - 133	17	65

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: 380-127839-A-1-B MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 521112

Prep Batch: 518483

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.5	15.4		ug/L		79	54 - 120	1	39
Pyrene	<0.19		19.5	19.8		ug/L		102	52 - 120	6	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	74		28 - 127
2-Fluorobiphenyl (Surr)	64		31 - 120
2-Fluorophenol (Surr)	45		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	30		10 - 120
p-Terphenyl-d14 (Surr)	98		45 - 120

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

Lab Sample ID: MB 570-519912/6

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 519912

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			01/03/25 12:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		38 - 134		01/03/25 12:35	1

Lab Sample ID: LCS 570-519912/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 519912

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	344		ug/L		86	78 - 120

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

Lab Sample ID: LCSD 570-519912/5

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 519912

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	334		ug/L		84	78 - 120	3	10

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		38 - 134

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: MRL 570-519912/3
Matrix: Water
Analysis Batch: 519912

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	11.1		ug/L		111	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		89					38 - 134

Lab Sample ID: 380-127839-C-1 MS
Matrix: Water
Analysis Batch: 519912

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	356		ug/L		89	68 - 122
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		93							38 - 134

Lab Sample ID: 380-127839-C-1 MSD
Matrix: Water
Analysis Batch: 519912

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	355		ug/L		89	68 - 122	0	18
Surrogate		MSD %Recovery		MSD Qualifier					Limits		
4-Bromofluorobenzene (Surr)		95							38 - 134		

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

Lab Sample ID: MB 570-518391/1-A
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 518391

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		12/27/24 19:52	01/03/25 17:18	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		12/27/24 19:52	01/03/25 17:18	1
C8-C18	<25		25	ug/L		12/27/24 19:52	01/03/25 17:18	1
Surrogate		MB %Recovery	MB Qualifier			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)		101				12/27/24 19:52	01/03/25 17:18	1

Lab Sample ID: LCS 570-518391/2-A
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1200		ug/L		75	56 - 127

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-127864-1
SDG: Weekly

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

Lab Sample ID: LCS 570-518391/2-A
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518391

	LCS %Recovery	LCS Qualifier	Limits
<i>n-Octacosane (Surr)</i>	105		60 - 130

Lab Sample ID: LCSD 570-518391/3-A
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 518391

	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C10-C28	1600	1220		ug/L		76	56 - 127	2	23
<i>n-Octacosane (Surr)</i>									
	LCSD %Recovery	LCSD Qualifier				Limits			
<i>n-Octacosane (Surr)</i>	104					60 - 130			

Lab Sample ID: MRL 570-518391/13-A
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 518391

	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	0.0200	0.0220	J	mg/L		110	50 - 150		
<i>n-Octacosane (Surr)</i>									
	MRL %Recovery	MRL Qualifier				Limits			
<i>n-Octacosane (Surr)</i>	101					60 - 130			

Lab Sample ID: 380-127839-B-1-A MS
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 518391

	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<26	F1	1630	1120	F1	ug/L		68	70 - 130		
<i>n-Octacosane (Surr)</i>											
	MS %Recovery	MS Qualifier				Limits					
<i>n-Octacosane (Surr)</i>	92					60 - 130					

Lab Sample ID: 380-127839-B-1-B MSD
Matrix: Water
Analysis Batch: 520017

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 518391

	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
C10-C28	<26	F1	1640	1260		ug/L		77	70 - 130	12	20
<i>n-Octacosane (Surr)</i>											
	MSD %Recovery	MSD Qualifier				Limits					
<i>n-Octacosane (Surr)</i>	102					60 - 130					

QC Association Summary

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

Job ID: 380-127864-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 125723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	
MB 380-125723/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-125723/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-125723/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-125723/22-A	Lab Control Sample	Total/NA	Water	525.2	
410-201798-E-1-A MS	Matrix Spike	Total/NA	Water	525.2	
410-201798-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

Analysis Batch: 125797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	125723
MB 380-125723/21-A	Method Blank	Total/NA	Water	525.2	125723
LCS 380-125723/23-A	Lab Control Sample	Total/NA	Water	525.2	125723
LCSD 380-125723/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	125723
MRL 380-125723/22-A	Lab Control Sample	Total/NA	Water	525.2	125723
410-201798-E-1-A MS	Matrix Spike	Total/NA	Water	525.2	125723
410-201798-E-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	125723

Prep Batch: 518483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	
MB 570-518483/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-518483/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-518483/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-127839-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-127839-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 521112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1 SIM	518483
MB 570-518483/1-A	Method Blank	Total/NA	Water	625.1 SIM	518483
LCS 570-518483/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	518483
LCSD 570-518483/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	518483
380-127839-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	518483
380-127839-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	518483

Analysis Batch: 521542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	518483
MB 570-518483/1-A	Method Blank	Total/NA	Water	625.1	518483

GC VOA

Analysis Batch: 519912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B GRO LL	
380-127864-2	TB Hawala Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-519912/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-519912/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-519912/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-519912/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-127864-1
 SDG: Weekly

GC VOA (Continued)

Analysis Batch: 519912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127839-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-127839-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 518391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	3510C	
MB 570-518391/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-518391/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-518391/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-518391/13-A	Lab Control Sample	Total/NA	Water	3510C	
380-127839-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-127839-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 520017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-127864-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B	518391
MB 570-518391/1-A	Method Blank	Total/NA	Water	8015B	518391
LCS 570-518391/2-A	Lab Control Sample	Total/NA	Water	8015B	518391
LCSD 570-518391/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	518391
MRL 570-518391/13-A	Lab Control Sample	Total/NA	Water	8015B	518391
380-127839-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	518391
380-127839-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	518391

Lab Chronicle

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

Job ID: 380-127864-1
 SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-127864-1

Date Collected: 12/24/24 09:38

Matrix: Drinking Water

Date Received: 12/27/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			125723	KRD3	EA POM	12/29/24 11:48
Total/NA	Analysis	525.2		1	125797	UPAC	EA POM	12/30/24 17:34
Total/NA	Prep	625.1			518483	UD4J	EET CAL 4	12/28/24 09:27
Total/NA	Analysis	625.1		1	521542	CG	EET CAL 4	01/09/25 17:26
Total/NA	Prep	625.1			518483	UD4J	EET CAL 4	12/28/24 09:27
Total/NA	Analysis	625.1 SIM		1	521112	PQS1	EET CAL 4	01/08/25 12:47
Total/NA	Analysis	8015B GRO LL		1	519912	A9VE	EET CAL 4	01/03/25 19:49
Total/NA	Prep	3510C			518391	TVD6	EET CAL 4	12/27/24 19:52
Total/NA	Analysis	8015B		1	520017	H6FE	EET CAL 4	01/03/25 20:52

Client Sample ID: TB Hawala Shaft Viewing Pool

Lab Sample ID: 380-127864-2

Date Collected: 12/24/24 09:38

Matrix: Water

Date Received: 12/27/24 09:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	519912	A9VE	EET CAL 4	01/03/25 15:38

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-127864-1
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	11-16-25
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25
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: 380-127864-1
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	525-23-159-97150	06-08-26
Washington	State	C916	10-11-25

- 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: 380-127864-1
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: 380-127864-1
SDG: Weekly

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-127864-1	Halawa Shaft Viewing Pool	Drinking Water	12/24/24 09:38	12/27/24 09:25
380-127864-2	TB Hawala Shaft Viewing Pool	Water	12/24/24 09:38	12/27/24 09:25

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

Client Information Client Contact: Dr Ron Fenstermacher Phone: 808-748-5840 E-Mail: Rachelle.Arada@et.eurofins.com City & County of Honolulu		Lab P.M.: Arada Rachelle State of Origin:		Carrier Tracking No(s): State of Origin:		COC No: 380-28005-2757 1 Page: Page 1 of 1 Job #:		
Address: 630 South Beretania Street Chemistry Lab City: Honolulu State, Zip: HI 96843 Phone: 808-748-5091(Tel) Email: RFENSTEMACHER@hbws.org Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill Site: Hawaii		PWSID: Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: C20525101 exp 05312023 WO #: Project #: 38001111 SSOW#:		Analysis Requested 533 All Analytes 537 1, DW, PREC 537 1 Full List 525 2, PREC (MOD) 525 Plus TICs 8015B_DRO_LL_CS - HNL Ranges C10-C24/C24-C38/C8-C18 8015B_GRO_LL (MOD) GRO 825 1, 825 1, SIM Perform MS/MSD (Yes or No)		Preservation Codes R NaThioSO4 RA NaThio/HCl Q Na2SO3 QA- Na2SO3/HCl Y Trizma I NH4 Acetate Other:		Total Number of Containers
Sample Identification Halawa Shaft Viewing Pool Sample Date: 2/24/24 Sample Time: 0938 Sample Type (C=Comp, G=grab): G Preservation Code:		Matrix (W=water, S=solid, O=soil, BT=Tissue, A=air) Water		Field Filled Sample (Yes or No): Field Filtered Sample (Yes or No): R I R A Q QA Y I 2 3 2 2 2		Special Instructions/Note: (631A) 4.0+0.3- 4.3 FedX-7710 4137 8979 (631A) 4.0+0.3- 5.1 FedX-7710 4137 8980 (631A) 3.6+0.3- 3.9 FedX-7710 4137 8968 380-127864 COC		
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 Relinquished by: [Redacted] Relinquished by: [Redacted] Relinquished by: [Redacted]								
Date/Time: 12/26/24 1200 Date/Time: [Redacted] Date/Time: [Redacted]		Date: 12/26/24 Date/Time: [Redacted]		Date/Time: 12/27/24 9125 Date/Time: 12/27/24 925 Date/Time: [Redacted]		Method of Shipment: FedX-7710 4137 8957 Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements		
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: (631A) 2.8+0.3- 3.1 961.4 10269		Company: [Redacted] Company: [Redacted] Company: [Redacted]		Ver: 04/02/2024		



Eurofins Eaton Analytical Pomona

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

Chain of Custody Record



eurofins | En

Loc: 380
127864

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Arada, Rachelle	Carrier Tracking No(s): N/A	COC No: 380-179700.1
Client Contact	Phone: N/A	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Shipping/Receiving				
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-127864-1

Address: 2841 Dow Avenue, Suite 100, City: Tustin State, Zip: CA, 92780 Phone: 714-895-5494(Tel) Email: N/A Project Name: RED-HILL Site: Honolulu BWS Sites	Due Date Requested: 1/13/2025 TAT Requested (days): N/A PO #: N/A WO #: N/A Project #: 38001111 SSOW#: N/A	Analysis Requested	Preservation Codes:
		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8015B_DRO_LL_CS/3510C_LL_HNL Ranges: C10- C24/C24-C36/C8-C18 625_1_SINM25_Prep (MOD) Extended PAH List 8015B_GRO_LLJ5030C (MOD) GRO	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=unknown)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested												Total Number of containers	Special Instructions/Note:
							8015B_DRO_LL_CS/3510C_LL_HNL Ranges: C10- C24/C24-C36/C8-C18	625_1_SINM25_Prep (MOD) Extended PAH List	8015B_GRO_LLJ5030C (MOD) GRO											
HALAWA SHAFT (331-241-TP401) (380-127864-1)	12/24/24	09:38 Hawaiian	G	Water		X	X	X									7	MRLs are needed. Confirm any hits >RL.		
TB: HALAWA SHAFT (331-241-TP401) (380-127864-2)	12/24/24	09:38 Hawaiian	G	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:	Date/Time: 12/27/24 15:25	Company: GCH	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0.5/1.2 5°C	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-127864-1

SDG Number: Weekly

Login Number: 127864

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-127864-1

SDG Number: Weekly

Login Number: 127864

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 12/27/24 05:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

