

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

RED-HILL
525.2
RUSH Weekly Red Hill

JOB NUMBER

380-77672-1

Eurofins Eaton Analytical Pomona

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Eaton Analytical, LLC Project Manager.

Compliance Statement

1. Laboratory is accredited in accordance with TNI 2016 Standards and ISO/IEC 17025:2017.
2. Laboratory certifies that the test results meet all TNI 2016 and ISO/IEC 17025:2017 requirements unless noted under the individual analysis
3. Test results relate only to the sample(s) tested.
4. This report shall not be reproduced except in full, without the written approval of the laboratory.
5. Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below. (DW, Water matrices)

Authorization



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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	13
QC Association Summary	22
Lab Chronicle	23
Certification Summary	24
Method Summary	26
Sample Summary	27
Chain of Custody	28
Receipt Checklists	30

Definitions/Glossary

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

Job ID: 380-77672-1
SDG: 525.2

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

GC/MS Semi VOA TICs

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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: 380-77672-1

Job ID: 380-77672-1

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Job Narrative 380-77672-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 1/9/2024 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8°C and 1.0°C

GC/MS Semi VOA

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: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2
PWSID Number: HI0000331

Lab Sample ID: 380-77672-1

No Detections.

Client Sample ID: AIEA WELLS PUMPS 2 (260)
PWSID Number: HI0000331

Lab Sample ID: 380-77672-2

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.

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Client Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-77672-1

Date Collected: 01/05/24 11:12

Matrix: Drinking Water

Date Received: 01/09/24 10:55

PWSID Number: HI0000331

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		01/10/24 10:50	01/11/24 20:18	1
2,4'-DDD	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
2,4'-DDE	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
2,4'-DDT	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
2-Methylnaphthalene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
4,4'-DDD	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
4,4'-DDE	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
4,4'-DDT	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Acenaphthene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Acenaphthylene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Acetochlor	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Alachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
alpha-BHC	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
alpha-Chlordane	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Anthracene	<0.020		0.020	ug/L		01/10/24 10:50	01/11/24 20:18	1
Atrazine	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Benz(a)anthracene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Benzo[a]pyrene	<0.020		0.020	ug/L		01/10/24 10:50	01/11/24 20:18	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		01/10/24 10:50	01/11/24 20:18	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		01/10/24 10:50	01/11/24 20:18	1
beta-BHC	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		01/10/24 10:50	01/11/24 20:18	1
Bromacil	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Butachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Butylbenzylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:18	1
Chlorobenzilate	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Chloroneb	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Chlorothalonil (Draconil, Bravo)	<0.098	^3+	0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Chlorpyrifos	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Chrysene	<0.020		0.020	ug/L		01/10/24 10:50	01/11/24 20:18	1
delta-BHC	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		01/10/24 10:50	01/11/24 20:18	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Dieldrin	<0.20		0.20	ug/L		01/10/24 10:50	01/11/24 20:18	1
Diethylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:18	1
Dimethylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:18	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		01/10/24 10:50	01/11/24 20:18	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Endosulfan sulfate	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Endrin	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Endrin aldehyde	<0.098	^3+	0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
EPTC	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Fluoranthene	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1

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Client Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-77672-1

Date Collected: 01/05/24 11:12

Matrix: Drinking Water

Date Received: 01/09/24 10:55

PWSID Number: HI0000331

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		01/10/24 10:50	01/11/24 20:18	1
gamma-Chlordane	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Heptachlor	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:18	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Hexachlorobenzene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Isophorone	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:18	1
Lindane	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:18	1
Malathion	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Methoxychlor	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Metolachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Molinate	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Naphthalene	<0.29		0.29	ug/L		01/10/24 10:50	01/11/24 20:18	1
Parathion	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Phenanthrene	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:18	1
Propachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Pyrene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Simazine	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Terbacil	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Terbutylazine	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1
Thiobencarb	<0.20		0.20	ug/L		01/10/24 10:50	01/11/24 20:18	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		01/10/24 10:50	01/11/24 20:18	1
trans-Nonachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:18	1
Trifluralin	<0.098		0.098	ug/L		01/10/24 10:50	01/11/24 20:18	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	01/10/24 10:50	01/11/24 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	93		70 - 130	01/10/24 10:50	01/11/24 20:18	1
Perylene-d12	104		70 - 130	01/10/24 10:50	01/11/24 20:18	1
Triphenylphosphate	116		70 - 130	01/10/24 10:50	01/11/24 20:18	1

Client Sample ID: AIEA WELLS PUMPS 2 (260)

Lab Sample ID: 380-77672-2

Date Collected: 01/05/24 11:52

Matrix: Drinking Water

Date Received: 01/09/24 10:55

PWSID Number: HI0000331

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		01/10/24 10:50	01/11/24 20:37	1
2,4'-DDD	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
2,4'-DDE	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
2,4'-DDT	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
2-Methylnaphthalene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
4,4'-DDD	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
4,4'-DDE	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA WELLS PUMPS 2 (260)

Lab Sample ID: 380-77672-2

Date Collected: 01/05/24 11:52

Matrix: Drinking Water

Date Received: 01/09/24 10:55

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Acenaphthene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Acenaphthylene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Acetochlor	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Alachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
alpha-BHC	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
alpha-Chlordane	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Anthracene	<0.019		0.019	ug/L		01/10/24 10:50	01/11/24 20:37	1
Atrazine	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Benz(a)anthracene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Benzo[a]pyrene	<0.019		0.019	ug/L		01/10/24 10:50	01/11/24 20:37	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		01/10/24 10:50	01/11/24 20:37	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		01/10/24 10:50	01/11/24 20:37	1
beta-BHC	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		01/10/24 10:50	01/11/24 20:37	1
Bromacil	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Butachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Butylbenzylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:37	1
Chlorobenzilate	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Chloroneb	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Chlorothalonil (Draconil, Bravo)	<0.097	^3+	0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Chlorpyrifos	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Chrysene	<0.019		0.019	ug/L		01/10/24 10:50	01/11/24 20:37	1
delta-BHC	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		01/10/24 10:50	01/11/24 20:37	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Dieldrin	<0.19		0.19	ug/L		01/10/24 10:50	01/11/24 20:37	1
Diethylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:37	1
Dimethylphthalate	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:37	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		01/10/24 10:50	01/11/24 20:37	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Endosulfan sulfate	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Endrin	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Endrin aldehyde	<0.097	^3+	0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
EPTC	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Fluoranthene	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Fluorene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
gamma-Chlordane	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Heptachlor	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:37	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Hexachlorobenzene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Isophorone	<0.49		0.49	ug/L		01/10/24 10:50	01/11/24 20:37	1
Lindane	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:37	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA WELLS PUMPS 2 (260)

Lab Sample ID: 380-77672-2

Date Collected: 01/05/24 11:52

Matrix: Drinking Water

Date Received: 01/09/24 10:55

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Malathion	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Methoxychlor	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Metolachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Molinate	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Naphthalene	<0.29		0.29	ug/L		01/10/24 10:50	01/11/24 20:37	1
Parathion	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Phenanthrene	<0.039		0.039	ug/L		01/10/24 10:50	01/11/24 20:37	1
Propachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Pyrene	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Simazine	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Terbacil	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Terbutylazine	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1
Thiobencarb	<0.19		0.19	ug/L		01/10/24 10:50	01/11/24 20:37	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		01/10/24 10:50	01/11/24 20:37	1
trans-Nonachlor	<0.049		0.049	ug/L		01/10/24 10:50	01/11/24 20:37	1
Trifluralin	<0.097		0.097	ug/L		01/10/24 10:50	01/11/24 20:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	01/10/24 10:50	01/11/24 20:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	94		70 - 130	01/10/24 10:50	01/11/24 20:37	1
Perylene-d12	103		70 - 130	01/10/24 10:50	01/11/24 20:37	1
Triphenylphosphate	114		70 - 130	01/10/24 10:50	01/11/24 20:37	1

Action Limit Summary

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-77672-1

PWSID Number: HI0000331

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	<0.098		ug/L	2		0.098	525.2	Total/NA
Heptachlor	<0.039		ug/L	0.4		0.039	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.049		ug/L	0.2		0.049	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	<0.039		ug/L	0.2		0.039	525.2	Total/NA
Methoxychlor	<0.098		ug/L	40		0.098	525.2	Total/NA
Simazine	<0.049		ug/L	4		0.049	525.2	Total/NA

Client Sample ID: AIEA WELLS PUMPS 2 (260)

Lab Sample ID: 380-77672-2

PWSID Number: HI0000331

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	<0.097		ug/L	2		0.097	525.2	Total/NA
Heptachlor	<0.039		ug/L	0.4		0.039	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.049		ug/L	0.2		0.049	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	<0.039		ug/L	0.2		0.039	525.2	Total/NA
Methoxychlor	<0.097		ug/L	40		0.097	525.2	Total/NA
Simazine	<0.049		ug/L	4		0.049	525.2	Total/NA

Surrogate Summary

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

Job ID: 380-77672-1
SDG: 525.2

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-77672-1	AIEA GULCH WELLS PUMP 2	93	104	116
380-77672-2	AIEA WELLS PUMPS 2 (260)	94	103	114

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-77302-P-1-A DU	Duplicate	95	104	119
380-77316-P-1-A MS	Matrix Spike	98	102	123
LCS 380-70940/23-A	Lab Control Sample	94	105	115
MB 380-70940/21-A	Method Blank	95	99	125
MRL 380-70940/22-A	Lab Control Sample	96	97	109

Surrogate Legend

2NMX = 2-Nitro-m-xylene

PRY = Perylene-d12

TPP = Triphenylphosphate

QC Sample Results

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

Job ID: 380-77672-1
 SDG: 525.2

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

Lab Sample ID: MB 380-70940/21-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 70940

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2,4'-DDD	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2,4'-DDE	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2,4'-DDT	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
2-Methylnaphthalene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
4,4'-DDD	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
4,4'-DDE	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
4,4'-DDT	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Acenaphthene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Acenaphthylene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Acetochlor	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Alachlor	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
alpha-BHC	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
alpha-Chlordane	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Anthracene	<0.020		0.020	ug/L		01/10/24 08:10	01/11/24 14:01	1
Atrazine	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Benz(a)anthracene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Benzo[a]pyrene	<0.020		0.020	ug/L		01/10/24 08:10	01/11/24 14:01	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		01/10/24 08:10	01/11/24 14:01	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		01/10/24 08:10	01/11/24 14:01	1
beta-BHC	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		01/10/24 08:10	01/11/24 14:01	1
Bromacil	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Butachlor	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Butylbenzylphthalate	<0.50		0.50	ug/L		01/10/24 08:10	01/11/24 14:01	1
Chlorobenzilate	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Chloroneb	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Chlorpyrifos	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Chrysene	<0.020		0.020	ug/L		01/10/24 08:10	01/11/24 14:01	1
delta-BHC	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		01/10/24 08:10	01/11/24 14:01	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Dieldrin	<0.20		0.20	ug/L		01/10/24 08:10	01/11/24 14:01	1
Diethylphthalate	<0.50		0.50	ug/L		01/10/24 08:10	01/11/24 14:01	1
Dimethylphthalate	<0.50		0.50	ug/L		01/10/24 08:10	01/11/24 14:01	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		01/10/24 08:10	01/11/24 14:01	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Endosulfan sulfate	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Endrin	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Endrin aldehyde	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
EPTC	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1

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QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: MB 380-70940/21-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 70940

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Fluorene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
gamma-Chlordane	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Heptachlor	<0.040		0.040	ug/L		01/10/24 08:10	01/11/24 14:01	1
Heptachlor epoxide (isomer B)	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Hexachlorobenzene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Isophorone	<0.50		0.50	ug/L		01/10/24 08:10	01/11/24 14:01	1
Lindane	<0.040		0.040	ug/L		01/10/24 08:10	01/11/24 14:01	1
Malathion	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Methoxychlor	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Metolachlor	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Molinate	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Naphthalene	<0.30		0.30	ug/L		01/10/24 08:10	01/11/24 14:01	1
Parathion	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Phenanthrene	<0.040		0.040	ug/L		01/10/24 08:10	01/11/24 14:01	1
Propachlor	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Pyrene	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Simazine	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Terbacil	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Terbutylazine	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1
Thiobencarb	<0.20		0.20	ug/L		01/10/24 08:10	01/11/24 14:01	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		01/10/24 08:10	01/11/24 14:01	1
trans-Nonachlor	<0.050		0.050	ug/L		01/10/24 08:10	01/11/24 14:01	1
Trifluralin	<0.099		0.099	ug/L		01/10/24 08:10	01/11/24 14:01	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Camphene	0.649	T J N	ug/L		2.29	79-92-5	01/10/24 08:10	01/11/24 14:01	1
Decane	3.07	T J N	ug/L		2.37	124-18-5	01/10/24 08:10	01/11/24 14:01	1
Phenol, 2,4-bis(1,1-dimethylethyl)-	0.602	T J N	ug/L		4.17	96-76-4	01/10/24 08:10	01/11/24 14:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	01/10/24 08:10	01/11/24 14:01	1
Perylene-d12	99		70 - 130	01/10/24 08:10	01/11/24 14:01	1
Triphenylphosphate	125		70 - 130	01/10/24 08:10	01/11/24 14:01	1

Lab Sample ID: LCS 380-70940/23-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.98	1.89		ug/L		95	70 - 130
2,4'-DDD	1.98	2.05		ug/L		103	70 - 130
2,4'-DDE	1.98	2.10		ug/L		106	70 - 130
2,4'-DDT	1.98	2.08		ug/L		105	70 - 130
2,4-Dinitrotoluene	1.98	1.86		ug/L		94	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: LCS 380-70940/23-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	1.98	1.85		ug/L		93	70 - 130
2-Methylnaphthalene	1.98	1.90		ug/L		96	70 - 130
4,4'-DDD	1.98	2.03		ug/L		102	70 - 130
4,4'-DDE	1.98	2.01		ug/L		101	70 - 130
4,4'-DDT	1.98	2.00		ug/L		101	70 - 130
Acenaphthene	1.98	1.81		ug/L		91	70 - 130
Acenaphthylene	1.98	1.83		ug/L		92	70 - 130
Acetochlor	1.98	1.72		ug/L		87	70 - 130
Alachlor	1.98	2.11		ug/L		106	70 - 130
alpha-BHC	1.98	1.78		ug/L		90	70 - 130
alpha-Chlordane	1.98	2.23		ug/L		112	70 - 130
Anthracene	1.98	1.92		ug/L		97	70 - 130
Atrazine	1.98	2.13		ug/L		107	70 - 130
Benz(a)anthracene	1.98	2.03		ug/L		102	70 - 130
Benzo[a]pyrene	1.98	2.07		ug/L		104	70 - 130
Benzo[b]fluoranthene	1.98	2.06		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.98	1.92		ug/L		97	70 - 130
Benzo[k]fluoranthene	1.98	2.15		ug/L		108	70 - 130
beta-BHC	1.98	1.86		ug/L		94	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	1.99		ug/L		100	70 - 130
Bromacil	1.98	2.12		ug/L		107	70 - 130
Butachlor	1.98	2.25		ug/L		113	70 - 130
Butylbenzylphthalate	1.98	2.20		ug/L		111	70 - 130
Chlorobenzilate	1.98	2.28		ug/L		115	70 - 130
Chloroneb	1.98	1.95		ug/L		98	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	2.11		ug/L		106	70 - 130
Chlorpyrifos	1.98	2.14		ug/L		108	70 - 130
Chrysene	1.98	1.93		ug/L		97	70 - 130
delta-BHC	1.98	1.82		ug/L		92	70 - 130
Di(2-ethylhexyl)adipate	1.98	2.28		ug/L		115	70 - 130
Dibenz(a,h)anthracene	1.98	2.07		ug/L		104	70 - 130
Diclorvos (DDVP)	1.98	1.64		ug/L		83	70 - 130
Dieldrin	1.98	1.98		ug/L		100	70 - 130
Diethylphthalate	1.98	1.82		ug/L		92	70 - 130
Dimethylphthalate	1.98	1.92		ug/L		97	70 - 130
Di-n-butyl phthalate	3.97	4.35		ug/L		109	70 - 130
Di-n-octyl phthalate	1.98	1.71		ug/L		86	70 - 130
Endosulfan I (Alpha)	1.98	1.86		ug/L		94	70 - 130
Endosulfan II (Beta)	1.98	2.02		ug/L		102	70 - 130
Endosulfan sulfate	1.98	2.38		ug/L		120	70 - 130
Endrin	1.98	2.16		ug/L		109	70 - 130
Endrin aldehyde	1.98	2.03		ug/L		102	70 - 130
EPTC	1.98	2.14		ug/L		108	70 - 130
Fluoranthene	1.98	2.04		ug/L		103	70 - 130
Fluorene	1.98	1.97		ug/L		99	70 - 130
gamma-Chlordane	1.98	2.31		ug/L		116	70 - 130
Heptachlor	1.98	1.82		ug/L		92	70 - 130
Heptachlor epoxide (isomer B)	1.98	2.22		ug/L		112	70 - 130
Hexachlorobenzene	1.98	2.07		ug/L		104	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: LCS 380-70940/23-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	1.98	2.05		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	2.02		ug/L		102	70 - 130
Isophorone	1.98	1.62		ug/L		82	70 - 130
Lindane	1.98	1.93		ug/L		97	70 - 130
Malathion	1.98	2.31		ug/L		116	70 - 130
Methoxychlor	1.98	1.82		ug/L		91	70 - 130
Metolachlor	1.98	2.03		ug/L		102	70 - 130
Molinate	1.98	2.01		ug/L		102	70 - 130
Naphthalene	1.98	1.81		ug/L		91	70 - 130
Parathion	1.98	1.95		ug/L		98	70 - 130
Pendimethalin (Penoxaline)	1.98	2.11		ug/L		106	70 - 130
Phenanthrene	1.98	1.87		ug/L		94	70 - 130
Propachlor	1.98	1.90		ug/L		96	70 - 130
Pyrene	1.98	2.05		ug/L		103	70 - 130
Simazine	1.98	2.19		ug/L		110	70 - 130
Terbacil	1.98	2.03		ug/L		102	70 - 130
Terbutylazine	1.98	2.05		ug/L		103	70 - 130
Thiobencarb	1.98	1.92		ug/L		97	70 - 130
trans-Nonachlor	1.98	2.09		ug/L		105	70 - 130
Trifluralin	1.98	2.32		ug/L		117	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	105		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: MRL 380-70940/22-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0995	0.109		ug/L		110	50 - 150
2,4'-DDD	0.0995	0.108		ug/L		109	50 - 150
2,4'-DDE	0.0995	0.100		ug/L		101	50 - 150
2,4'-DDT	0.0995	0.0814	J	ug/L		82	50 - 150
2,4-Dinitrotoluene	0.0995	0.0763	J	ug/L		77	50 - 150
2,6-Dinitrotoluene	0.0995	0.0780	J	ug/L		78	50 - 150
2-Methylnaphthalene	0.0995	0.103		ug/L		104	50 - 150
4,4'-DDD	0.0995	0.0893	J	ug/L		90	50 - 150
4,4'-DDE	0.0995	0.135		ug/L		136	50 - 150
4,4'-DDT	0.0995	0.107		ug/L		108	50 - 150
Acenaphthene	0.0995	0.0933	J	ug/L		94	50 - 150
Acenaphthylene	0.0995	0.0889	J	ug/L		89	50 - 150
Acetochlor	0.0497	0.0413	J	ug/L		83	50 - 150
Alachlor	0.0497	0.0519		ug/L		104	50 - 150
alpha-BHC	0.0995	0.101		ug/L		102	50 - 150
alpha-Chlordane	0.0249	0.0293	J	ug/L		118	50 - 150
Anthracene	0.0199	<0.019		ug/L		95	50 - 150

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: MRL 380-70940/22-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	0.0497	<0.048		ug/L		93	50 - 150
Benz(a)anthracene	0.0497	0.0432	J	ug/L		87	50 - 150
Benzo[a]pyrene	0.0199	0.0150	J	ug/L		76	50 - 150
Benzo[b]fluoranthene	0.0199	0.0171	J	ug/L		86	50 - 150
Benzo[g,h,i]perylene	0.0497	0.0419	J	ug/L		84	50 - 150
Benzo[k]fluoranthene	0.0199	<0.017		ug/L		85	50 - 150
beta-BHC	0.0995	0.0967	J	ug/L		97	50 - 150
Bis(2-ethylhexyl) phthalate	0.597	0.612		ug/L		103	50 - 150
Bromacil	0.0995	0.102		ug/L		102	50 - 150
Butachlor	0.0497	0.0530		ug/L		107	50 - 150
Butylbenzylphthalate	0.149	0.151	J	ug/L		102	50 - 150
Chlorobenzilate	0.0995	0.105		ug/L		105	50 - 150
Chloroneb	0.0995	0.105		ug/L		105	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0995	0.152	^3+	ug/L		153	50 - 150
Chlorpyrifos	0.0497	0.0541		ug/L		109	50 - 150
Chrysene	0.0199	0.0183	J	ug/L		92	50 - 150
delta-BHC	0.0995	0.105		ug/L		105	50 - 150
Di(2-ethylhexyl)adipate	0.298	0.338	J	ug/L		113	50 - 150
Dibenz(a,h)anthracene	0.0497	0.0419	J	ug/L		84	50 - 150
Diclorvos (DDVP)	0.0497	0.0516		ug/L		104	50 - 150
Dieldrin	0.0995	0.116	J	ug/L		117	50 - 150
Diethylphthalate	0.149	0.159	J	ug/L		107	50 - 150
Dimethylphthalate	0.298	0.292	J	ug/L		98	50 - 150
Di-n-butyl phthalate	0.298	0.388	J	ug/L		130	49 - 243
Di-n-octyl phthalate	0.0995	0.118		ug/L		119	50 - 150
Endosulfan I (Alpha)	0.0995	0.0955	J	ug/L		96	50 - 150
Endosulfan II (Beta)	0.0995	0.118		ug/L		119	50 - 150
Endosulfan sulfate	0.0995	0.106		ug/L		107	50 - 150
Endrin	0.0995	0.100		ug/L		101	50 - 150
Endrin aldehyde	0.0995	0.153	^3+	ug/L		154	50 - 150
EPTC	0.0995	0.112		ug/L		112	50 - 150
Fluoranthene	0.0497	0.0524	J	ug/L		105	50 - 150
Fluorene	0.0497	<0.050		ug/L		96	50 - 150
gamma-Chlordane	0.0249	0.0303	J	ug/L		122	50 - 150
Heptachlor	0.0398	0.0520		ug/L		131	50 - 150
Heptachlor epoxide (isomer B)	0.0497	0.0622		ug/L		125	50 - 150
Hexachlorobenzene	0.0497	0.0504		ug/L		101	50 - 150
Hexachlorocyclopentadiene	0.0497	0.0447	J	ug/L		90	50 - 150
Indeno[1,2,3-cd]pyrene	0.0497	0.0414	J	ug/L		83	50 - 150
Isophorone	0.0995	0.0949	J	ug/L		95	50 - 150
Lindane	0.0398	0.0430		ug/L		108	50 - 150
Malathion	0.0995	0.101		ug/L		102	50 - 150
Methoxychlor	0.0995	0.100		ug/L		101	50 - 150
Metolachlor	0.0497	0.0550		ug/L		111	50 - 150
Molinate	0.0995	0.103		ug/L		104	50 - 150
Naphthalene	0.0995	0.114	J	ug/L		114	50 - 150
Parathion	0.0995	0.121		ug/L		122	50 - 150
Pendimethalin (Penoxaline)	0.0995	0.0982	J	ug/L		99	50 - 150
Phenanthrene	0.0199	0.0212	J	ug/L		106	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: MRL 380-70940/22-A
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Propachlor	0.0497	0.0495	J	ug/L		100	50 - 150
Pyrene	0.0497	0.0511		ug/L		103	50 - 150
Simazine	0.0497	0.0477	J	ug/L		96	50 - 150
Terbacil	0.0995	0.0920	J	ug/L		92	50 - 150
Terbutylazine	0.0995	0.0932	J	ug/L		94	50 - 150
Thiobencarb	0.0995	0.109	J	ug/L		110	50 - 150
trans-Nonachlor	0.0249	<0.026		ug/L		102	50 - 150
Trifluralin	0.0995	0.0916	J	ug/L		92	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	109		70 - 130

Lab Sample ID: 380-77316-P-1-A MS
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.94	1.94		ug/L		100	70 - 130
2,4'-DDD	<0.098		1.94	2.17		ug/L		112	70 - 130
2,4'-DDE	<0.098		1.94	2.20		ug/L		113	70 - 130
2,4'-DDT	<0.098		1.94	2.38		ug/L		123	70 - 130
2,4-Dinitrotoluene	<0.098		1.94	2.29		ug/L		118	70 - 130
2,6-Dinitrotoluene	<0.098		1.94	2.13		ug/L		109	70 - 130
2-Methylnaphthalene	<0.098		1.94	1.99		ug/L		102	70 - 130
4,4'-DDD	<0.098		1.94	2.26		ug/L		116	70 - 130
4,4'-DDE	<0.098		1.94	2.07		ug/L		107	70 - 130
4,4'-DDT	<0.098		1.94	2.26		ug/L		116	70 - 130
Acenaphthene	<0.098		1.94	1.82		ug/L		94	70 - 130
Acenaphthylene	<0.098		1.94	1.95		ug/L		100	70 - 130
Acetochlor	<0.098		1.94	1.80		ug/L		93	70 - 130
Alachlor	<0.049		1.94	2.19		ug/L		113	70 - 130
alpha-BHC	<0.098		1.94	1.92		ug/L		99	70 - 130
alpha-Chlordane	<0.049		1.94	2.40		ug/L		123	70 - 130
Anthracene	<0.020		1.94	1.96		ug/L		101	70 - 130
Atrazine	<0.049		1.94	2.18		ug/L		112	70 - 130
Benz(a)anthracene	<0.049		1.94	2.23		ug/L		115	70 - 130
Benzo[a]pyrene	<0.020		1.94	2.12		ug/L		109	70 - 130
Benzo[b]fluoranthene	<0.020		1.94	2.16		ug/L		111	70 - 130
Benzo[g,h,i]perylene	<0.049		1.94	1.83		ug/L		94	70 - 130
Benzo[k]fluoranthene	<0.020		1.94	2.14		ug/L		110	70 - 130
beta-BHC	<0.098		1.94	1.98		ug/L		102	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.94	2.02		ug/L		104	70 - 130
Bromacil	<0.098		1.94	2.51		ug/L		129	70 - 130
Butachlor	<0.049		1.94	2.33		ug/L		120	70 - 130
Butylbenzylphthalate	<0.49		1.94	2.37		ug/L		122	70 - 130
Chlorobenzilate	<0.098		1.94	2.52		ug/L		129	70 - 130

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: 380-77316-P-1-A MS
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloroneb	<0.098		1.94	2.00		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098	^3+	1.94	2.22		ug/L		114	70 - 130
Chlorpyrifos	<0.049		1.94	2.14		ug/L		110	70 - 130
Chrysene	<0.020		1.94	2.00		ug/L		103	70 - 130
delta-BHC	<0.098		1.94	1.82		ug/L		94	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.94	2.38		ug/L		123	70 - 130
Dibenz(a,h)anthracene	<0.049		1.94	2.00		ug/L		103	70 - 130
Diclorvos (DDVP)	<0.049		1.94	1.79		ug/L		92	70 - 130
Dieldrin	<0.20		1.94	2.03		ug/L		104	70 - 130
Diethylphthalate	<0.49		1.94	2.06		ug/L		106	70 - 130
Dimethylphthalate	<0.49		1.94	2.07		ug/L		106	70 - 130
Di-n-butyl phthalate	<0.98		3.89	4.56		ug/L		115	70 - 130
Di-n-octyl phthalate	<0.098		1.94	1.81		ug/L		93	70 - 130
Endosulfan I (Alpha)	<0.098		1.94	1.90		ug/L		98	70 - 130
Endosulfan II (Beta)	<0.098		1.94	2.20		ug/L		113	70 - 130
Endosulfan sulfate	<0.098		1.94	2.53		ug/L		130	70 - 130
Endrin	<0.098		1.94	2.09		ug/L		107	70 - 130
Endrin aldehyde	<0.098	F1 ^3+	1.94	1.27	F1	ug/L		65	70 - 130
EPTC	<0.098		1.94	2.29		ug/L		118	70 - 130
Fluoranthene	<0.098		1.94	2.15		ug/L		111	70 - 130
Fluorene	<0.049		1.94	2.04		ug/L		105	70 - 130
gamma-Chlordane	<0.049		1.94	2.44		ug/L		125	70 - 130
Heptachlor	<0.039		1.94	1.94		ug/L		100	70 - 130
Heptachlor epoxide (isomer B)	<0.049		1.94	2.35		ug/L		121	70 - 130
Hexachlorobenzene	<0.049		1.94	2.10		ug/L		108	70 - 130
Hexachlorocyclopentadiene	<0.049		1.94	2.27		ug/L		117	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.94	2.00		ug/L		103	70 - 130
Isophorone	<0.49		1.94	1.70		ug/L		88	70 - 130
Lindane	<0.039		1.94	2.03		ug/L		104	70 - 130
Malathion	<0.098		1.94	2.47		ug/L		127	70 - 130
Methoxychlor	<0.098		1.94	2.02		ug/L		104	70 - 130
Metolachlor	<0.049		1.94	2.28		ug/L		117	70 - 130
Molinate	<0.098		1.94	2.15		ug/L		110	70 - 130
Naphthalene	<0.29		1.94	1.86		ug/L		96	70 - 130
Parathion	<0.098		1.94	2.27		ug/L		117	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.94	2.38		ug/L		123	70 - 130
Phenanthrene	<0.039		1.94	1.90		ug/L		98	70 - 130
Propachlor	<0.049		1.94	2.15		ug/L		110	70 - 130
Pyrene	<0.049		1.94	2.19		ug/L		113	70 - 130
Simazine	<0.049		1.94	2.25		ug/L		115	70 - 130
Terbacil	<0.098		1.94	2.07		ug/L		107	70 - 130
Terbutylazine	<0.098		1.94	2.14		ug/L		110	70 - 130
Thiobencarb	<0.20		1.94	2.04		ug/L		105	70 - 130
trans-Nonachlor	<0.049		1.94	2.26		ug/L		116	70 - 130
Trifluralin	<0.098	F1	1.94	2.67	F1	ug/L		137	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: 380-77316-P-1-A MS
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 70940

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
<i>Perylene-d12</i>	102		70 - 130
<i>Triphenylphosphate</i>	123		70 - 130

Lab Sample ID: 380-77302-P-1-A DU
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1-Methylnaphthalene	<0.096		<0.096		ug/L		NC	20
2,4'-DDD	<0.096		<0.096		ug/L		NC	20
2,4'-DDE	<0.096		<0.096		ug/L		NC	20
2,4'-DDT	<0.096		<0.096		ug/L		NC	20
2,4-Dinitrotoluene	<0.096		<0.096		ug/L		NC	20
2,6-Dinitrotoluene	<0.096		<0.096		ug/L		NC	20
2-Methylnaphthalene	<0.096		<0.096		ug/L		NC	20
4,4'-DDD	<0.096		<0.096		ug/L		NC	20
4,4'-DDE	<0.096		<0.096		ug/L		NC	20
4,4'-DDT	<0.096		<0.096		ug/L		NC	20
Acenaphthene	<0.096		<0.096		ug/L		NC	20
Acenaphthylene	<0.096		<0.096		ug/L		NC	20
Acetochlor	<0.096		<0.096		ug/L		NC	20
Alachlor	<0.048		<0.048		ug/L		NC	20
alpha-BHC	<0.096		<0.096		ug/L		NC	20
alpha-Chlordane	<0.048		<0.048		ug/L		NC	20
Anthracene	<0.019		<0.019		ug/L		NC	20
Atrazine	<0.048		<0.048		ug/L		NC	20
Benz(a)anthracene	<0.048		<0.048		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.048		<0.048		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.096		<0.096		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.57		<0.58		ug/L		NC	20
Bromacil	<0.096		<0.096		ug/L		NC	20
Butachlor	<0.048		<0.048		ug/L		NC	20
Butylbenzylphthalate	<0.48		<0.48		ug/L		NC	20
Chlorobenzilate	<0.096		<0.096		ug/L		NC	20
Chloroneb	<0.096		<0.096		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.096	^3+	<0.096		ug/L		NC	20
Chlorpyrifos	<0.048		<0.048		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.096		<0.096		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.57		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.048		<0.048		ug/L		NC	20
Diclorvos (DDVP)	<0.048		<0.048		ug/L		NC	20
Dieldrin	<0.19		<0.19		ug/L		NC	20
Diethylphthalate	<0.48		<0.48		ug/L		NC	20
Dimethylphthalate	<0.48		<0.48		ug/L		NC	20

QC Sample Results

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

Job ID: 380-77672-1
SDG: 525.2

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

Lab Sample ID: 380-77302-P-1-A DU
Matrix: Water
Analysis Batch: 71117

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 70940

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Di-n-butyl phthalate	<0.96		<0.96		ug/L		NC	20
Di-n-octyl phthalate	<0.096		<0.096		ug/L		NC	20
Endosulfan I (Alpha)	<0.096		<0.096		ug/L		NC	20
Endosulfan II (Beta)	<0.096		<0.096		ug/L		NC	20
Endosulfan sulfate	<0.096		<0.096		ug/L		NC	20
Endrin	<0.096		<0.096		ug/L		NC	20
Endrin aldehyde	<0.096	^3+	<0.096		ug/L		NC	20
EPTC	<0.096		<0.096		ug/L		NC	20
Fluoranthene	<0.096		<0.096		ug/L		NC	20
Fluorene	<0.048		<0.048		ug/L		NC	20
gamma-Chlordane	<0.048		<0.048		ug/L		NC	20
Heptachlor	<0.038		<0.038		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.048		<0.048		ug/L		NC	20
Hexachlorobenzene	<0.048		<0.048		ug/L		NC	20
Hexachlorocyclopentadiene	<0.048		<0.048		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.048		<0.048		ug/L		NC	20
Isophorone	<0.48		<0.48		ug/L		NC	20
Lindane	<0.038		<0.038		ug/L		NC	20
Malathion	<0.096		<0.096		ug/L		NC	20
Methoxychlor	<0.096		<0.096		ug/L		NC	20
Metolachlor	<0.048		<0.048		ug/L		NC	20
Molinate	<0.096		<0.096		ug/L		NC	20
Naphthalene	<0.29		<0.29		ug/L		NC	20
Parathion	<0.096		<0.096		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.096		<0.096		ug/L		NC	20
Phenanthrene	<0.038		<0.038		ug/L		NC	20
Propachlor	<0.048		<0.048		ug/L		NC	20
Pyrene	<0.048		<0.048		ug/L		NC	20
Simazine	<0.048		<0.048		ug/L		NC	20
Terbacil	<0.096		<0.096		ug/L		NC	20
Terbutylazine	<0.096		<0.096		ug/L		NC	20
Thiobencarb	<0.19		<0.19		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.048		<0.048		ug/L		NC	20
Trifluralin	<0.096		<0.096		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	104		70 - 130
Triphenylphosphate	119		70 - 130

QC Association Summary

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

Job ID: 380-77672-1
 SDG: 525.2

GC/MS Semi VOA

Prep Batch: 70940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-77672-1	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	
380-77672-2	AIEA WELLS PUMPS 2 (260)	Total/NA	Drinking Water	525.2	
MB 380-70940/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-70940/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-70940/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-77316-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-77302-P-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 71117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-77672-1	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	70940
380-77672-2	AIEA WELLS PUMPS 2 (260)	Total/NA	Drinking Water	525.2	70940
MB 380-70940/21-A	Method Blank	Total/NA	Water	525.2	70940
LCS 380-70940/23-A	Lab Control Sample	Total/NA	Water	525.2	70940
MRL 380-70940/22-A	Lab Control Sample	Total/NA	Water	525.2	70940
380-77316-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	70940
380-77302-P-1-A DU	Duplicate	Total/NA	Water	525.2	70940



Lab Chronicle

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

Job ID: 380-77672-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-77672-1

Date Collected: 01/05/24 11:12

Matrix: Drinking Water

Date Received: 01/09/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			70940	OTM3	EA POM	01/10/24 10:50
Total/NA	Analysis	525.2		1	71117	Q8LA	EA POM	01/11/24 20:18

Client Sample ID: AIEA WELLS PUMPS 2 (260)

Lab Sample ID: 380-77672-2

Date Collected: 01/05/24 11:52

Matrix: Drinking Water

Date Received: 01/09/24 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			70940	OTM3	EA POM	01/10/24 10:50
Total/NA	Analysis	525.2		1	71117	Q8LA	EA POM	01/11/24 20:37

Laboratory References:

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

Accreditation/Certification Summary

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

Job ID: 380-77672-1
 SDG: 525.2

Laboratory: Eurofins Eaton Analytical Pomona

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

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-24

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	Acenaphthene
525.2	525.2	Drinking Water	Acenaphthylene
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	Anthracene
525.2	525.2	Drinking Water	Benz(a)anthracene
525.2	525.2	Drinking Water	Benzo[b]fluoranthene
525.2	525.2	Drinking Water	Benzo[g,h,i]perylene
525.2	525.2	Drinking Water	Benzo[k]fluoranthene
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Bromacil
525.2	525.2	Drinking Water	Butylbenzylphthalate
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	Chrysene
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Dibenz(a,h)anthracene
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Diethylphthalate
525.2	525.2	Drinking Water	Dimethylphthalate
525.2	525.2	Drinking Water	Di-n-butyl phthalate
525.2	525.2	Drinking Water	Di n octyl phthalate
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	Fluoranthene
525.2	525.2	Drinking Water	Fluorene
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Indeno[1,2,3-cd]pyrene
525.2	525.2	Drinking Water	Isophorone

Accreditation/Certification Summary

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

Job ID: 380-77672-1
SDG: 525.2

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date
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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	Malathion
525.2	525.2	Drinking Water	Molinate
525.2	525.2	Drinking Water	Naphthalene
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Phenanthrene
525.2	525.2	Drinking Water	Pyrene
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Thiobencarb
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor
525.2	525.2	Drinking Water	Trifluralin

Method Summary

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

Job ID: 380-77672-1
SDG: 525.2

Method	Method Description	Protocol	Laboratory
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	EA POM
525.2	Extraction of Semivolatile Compounds	EPA	EA POM

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

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Sample Summary

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

Job ID: 380-77672-1
SDG: 525.2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-77672-1	AIEA GULCH WELLS PUMP 2	Drinking Water	01/05/24 11:12	01/09/24 10:55	HI0000331
380-77672-2	AIEA WELLS PUMPS 2 (260)	Drinking Water	01/05/24 11:52	01/09/24 10:55	HI0000331

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Monrovia, CA (Suite 100)
 750 Royal Oaks Drive Suite 100
 Monrovia, CA 91016
 Phone (626) 386-1100

Chain of Custody Record



Client Information		Lab PM Arada, Rachelle	Carrier Tracking No(s)	COC No
Client Contact: Dr Ron Fenstermacher		E-Mail Rachelle.Arada@eurofins.com	State of Origin	Page Page 1 of 2
City and County of Honolulu		PWSID	Job #	
Address 630 South Beretania St. Chemistry Lab Honolulu		Analysis Requested		
City Honolulu		Total Number of Containers		
State, Zip Hawaii 96843		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: ammonium acetate		
Phone 808-748-5841		M - Hexane N - None O - AshNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)		
Email RFENSTEMACHER@hbws.org		ammonium acetate		
Project Name RED HILL/HBWS Sites Event Desc. RUSH Weekly Red Hill		Special Instructions/Note:		
Site Hawaii		Chlorinated		
Due Date Requested:		Temp blank 30 °C		
TAT Requested (days): Standard		380-77672 COC		
Compliance Project: Δ Yes Δ No		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
PO # C20525101 exp 05312023		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		
WO #		Special Instructions/QC Requirements		
Project # 38001111		Method of Shipment: FEDEX (2) 7747 2671 6936		
SSOW#		Date/Time: 01/09/2024 10:55 Company: ECAP		
Sample Date		Date/Time: 01/09/2024 10:55 Company: ECAP		
Sample Time		Date/Time: _____ Company: _____		
Sample Type (C=Comp, G=grab)		Custody Seals Intact: Δ Yes Δ No		
Sample Preservation Code:		Custody Seal No. _____		
Matrix (W=water, S=solid, O=wastefl, BT=Tissue, Ash)		Custody Seal No. _____		
AIEA GULCH WELLS PUMP 2		Custody Seal No. _____		
AIEA WELLS PUMPS 2 (260)		Custody Seal No. _____		
TB AIEA GULCH WELLS PUMP 2		Custody Seal No. _____		
TB AIEA WELLS PUMPS 1&2 (260)		Custody Seal No. _____		
Possible Hazard Identification		Custody Seal No. _____		
Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Custody Seal No. _____		
Deliverable Requested I, II, III, IV, Other (specify)		Custody Seal No. _____		
Empty Kit Relinquished by		Custody Seal No. _____		
Relinquished by: _____		Custody Seal No. _____		
Relinquished by: _____		Custody Seal No. _____		
Relinquished by: _____		Custody Seal No. _____		
Custody Seals Intact: Δ Yes Δ No		Custody Seal No. _____		



Eurofins Eaton Analytical Pomona

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

Chain of Custody Record



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Loc: 380
77672

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Arada, Rachele		Carrier Tracking No(s):		COC No: 380-98979.1		
Client Contact: Shipping/Receiving		Phone:		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 #: 380-77672-1		
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 1/29/2024		Analysis Requested					Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
City: Tustin		TAT Requested (days):								
State, Zip: CA, 92780		PO #:								
Phone: 714-895-5494(Tel)		WO #:								
Project Name: RED-HILL		Project #: 38001111								
Site: Honolulu BWS Sites		SSOW#:								

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soils/sed, BT=Tissue, An=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_GRO_LL5030C (MOD) GRO	8015B_DRG_LL_CS3510C_LL HNL Ranges: C10-C24/C24-C35/C8-C18	8015B_GRO_LL5030C GRO	Total Number of Containers	Special Instructions/Note:
AIEA GULCH WELLS PUMP 2 (380-77672-1)	1/5/24	11:12 Hawaiian		Water	X	X				6	MRLs are needed, initial volume (500ml) and final volume (2ml). MRLs are needed.
AIEA WELLS PUMPS 2 (260) (380-77672-2)	1/5/24	11:52 Hawaiian		Water	X	X				6	MRLs are needed, initial volume (500ml) and final volume (2ml). MRLs are needed.
TB: AIEA GULCH WELLS PUMP 2 (380-77672-3)	1/5/24	11:12 Hawaiian		Water				X		2	MRLs are needed.
TB: AIEA WELLS PUMPS 2 (260) (380-77672-4)	1/5/24	11:52 Hawaiian		Water				X		2	MRLs are needed.

380-77672 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/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)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Date: Time: Method of Shipment:	
Relinquished by:		Date/Time: 1/10/24 1110 Company:	
Relinquished by:		Date/Time: 1/10/24 11:10 Company: EC	
Relinquished by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:	
		Cooler Temperature(s) °C and Other Remarks: 1.3 / 1.3 SEC 12	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-77672-1

SDG Number: 525.2

Login Number: 77672

List Number: 1

Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and 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	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

