

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

380-89625-1

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



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Definitions/Glossary

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

Job ID: 380-89625-1
SDG: 525.2

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD 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
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: 380-89625-1

Job ID: 380-89625-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-89625-1

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 4/3/2024 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.3°C, 2.5°C and 2.7°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: 380-89625-1
SDG: 525.2

Client Sample ID: MOANALUA WELLS
PWSID Number: HI0000331

Lab Sample ID: 380-89625-1

No Detections.

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

Lab Sample ID: 380-89625-2

No Detections.

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
PWSID Number: HI0000331

Lab Sample ID: 380-89625-3

No Detections.

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
PWSID Number: HI0000331

Lab Sample ID: 380-89625-4

No Detections.

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

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-89625-1

Date Collected: 04/01/24 09:48

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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		04/05/24 09:13	04/07/24 12:23	1
2,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
2,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
2,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
4,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
4,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
4,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Acenaphthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Acenaphthylene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Acetochlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Alachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
alpha-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
alpha-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Anthracene	<0.020	F1	0.020	ug/L		04/05/24 09:13	04/07/24 12:23	1
Atrazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 12:23	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 12:23	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 12:23	1
beta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 12:23	1
Bromacil	<0.098	F1 *+	0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Butachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 12:23	1
Chlorobenzilate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Chloroneb	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Chlorpyrifos	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Chrysene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 12:23	1
delta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 12:23	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Dieldrin	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 12:23	1
Diethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 12:23	1
Dimethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 12:23	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/05/24 09:13	04/07/24 12:23	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Endrin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Endrin aldehyde	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
EPTC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Fluoranthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1

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Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-89625-1

Date Collected: 04/01/24 09:48

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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		04/05/24 09:13	04/07/24 12:23	1
gamma-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Heptachlor	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 12:23	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Isophorone	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 12:23	1
Lindane	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 12:23	1
Malathion	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Methoxychlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Metolachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Molinate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Naphthalene	<0.29		0.29	ug/L		04/05/24 09:13	04/07/24 12:23	1
Parathion	<0.098	*+	0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Phenanthrene	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 12:23	1
Propachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Simazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Terbacil	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Terbutylazine	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1
Thiobencarb	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 12:23	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 12:23	1
trans-Nonachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 12:23	1
Trifluralin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 12:23	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/05/24 09:13	04/07/24 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	04/05/24 09:13	04/07/24 12:23	1
Perylene-d12	103		70 - 130	04/05/24 09:13	04/07/24 12:23	1
Triphenylphosphate	104		70 - 130	04/05/24 09:13	04/07/24 12:23	1

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-89625-2

Date Collected: 04/01/24 10:41

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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		04/05/24 09:13	04/07/24 16:04	1
2,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
2,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
2,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
4,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
4,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1

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Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-89625-2

Date Collected: 04/01/24 10:41

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Acenaphthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Acenaphthylene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Acetochlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Alachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
alpha-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
alpha-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Anthracene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 16:04	1
Atrazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 16:04	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 16:04	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 16:04	1
beta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 16:04	1
Bromacil	<0.098	+	0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Butachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 16:04	1
Chlorobenzilate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Chloroneb	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Chlorpyrifos	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Chrysene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 16:04	1
delta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 16:04	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Dieldrin	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 16:04	1
Diethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 16:04	1
Dimethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 16:04	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/05/24 09:13	04/07/24 16:04	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Endrin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Endrin aldehyde	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
EPTC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Fluoranthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Fluorene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
gamma-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Heptachlor	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 16:04	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Isophorone	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 16:04	1
Lindane	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 16:04	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-89625-2

Date Collected: 04/01/24 10:41

Matrix: Drinking Water

Date Received: 04/03/24 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Malathion	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Methoxychlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Metolachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Molinate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Naphthalene	<0.29		0.29	ug/L		04/05/24 09:13	04/07/24 16:04	1
Parathion	<0.098	+	0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Phenanthrene	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 16:04	1
Propachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Simazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Terbacil	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Terbutylazine	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1
Thiobencarb	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 16:04	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 16:04	1
trans-Nonachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 16:04	1
Trifluralin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 16:04	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	2.1	T J	ug/L		13.70	N/A	04/05/24 09:13	04/07/24 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	100		70 - 130	04/05/24 09:13	04/07/24 16:04	1
Perylene-d12	106		70 - 130	04/05/24 09:13	04/07/24 16:04	1
Triphenylphosphate	103		70 - 130	04/05/24 09:13	04/07/24 16:04	1

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-89625-3

Date Collected: 04/01/24 11:10

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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		04/05/24 09:13	04/07/24 17:05	1
2,4'-DDD	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
2,4'-DDE	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
2,4'-DDT	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
2-Methylnaphthalene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
4,4'-DDD	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
4,4'-DDE	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
4,4'-DDT	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Acenaphthene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Acenaphthylene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Acetochlor	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Alachlor	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
alpha-BHC	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
alpha-Chlordane	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Anthracene	<0.019		0.019	ug/L		04/05/24 09:13	04/07/24 17:05	1
Atrazine	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-89625-3

Date Collected: 04/01/24 11:10

Matrix: Drinking Water

Date Received: 04/03/24 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benz(a)anthracene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/05/24 09:13	04/07/24 17:05	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/05/24 09:13	04/07/24 17:05	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/05/24 09:13	04/07/24 17:05	1
beta-BHC	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/05/24 09:13	04/07/24 17:05	1
Bromacil	<0.097	+	0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Butachlor	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Butylbenzylphthalate	<0.48		0.48	ug/L		04/05/24 09:13	04/07/24 17:05	1
Chlorobenzilate	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Chloroneb	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Chlorpyrifos	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Chrysene	<0.019		0.019	ug/L		04/05/24 09:13	04/07/24 17:05	1
delta-BHC	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		04/05/24 09:13	04/07/24 17:05	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Dieldrin	<0.19		0.19	ug/L		04/05/24 09:13	04/07/24 17:05	1
Diethylphthalate	<0.48		0.48	ug/L		04/05/24 09:13	04/07/24 17:05	1
Dimethylphthalate	<0.48		0.48	ug/L		04/05/24 09:13	04/07/24 17:05	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		04/05/24 09:13	04/07/24 17:05	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Endosulfan sulfate	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Endrin	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Endrin aldehyde	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
EPTC	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Fluoranthene	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Fluorene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
gamma-Chlordane	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Heptachlor	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 17:05	1
Heptachlor epoxide (isomer B)	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Hexachlorobenzene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Isophorone	<0.48		0.48	ug/L		04/05/24 09:13	04/07/24 17:05	1
Lindane	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 17:05	1
Malathion	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Methoxychlor	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Metolachlor	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Molinate	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Naphthalene	<0.29		0.29	ug/L		04/05/24 09:13	04/07/24 17:05	1
Parathion	<0.097	+	0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Phenanthrene	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 17:05	1
Propachlor	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-89625-3

Date Collected: 04/01/24 11:10

Matrix: Drinking Water

Date Received: 04/03/24 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Simazine	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Terbacil	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Terbutylazine	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1
Thiobencarb	<0.19		0.19	ug/L		04/05/24 09:13	04/07/24 17:05	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/05/24 09:13	04/07/24 17:05	1
trans-Nonachlor	<0.048		0.048	ug/L		04/05/24 09:13	04/07/24 17:05	1
Trifluralin	<0.097		0.097	ug/L		04/05/24 09:13	04/07/24 17:05	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/05/24 09:13	04/07/24 17:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	04/05/24 09:13	04/07/24 17:05	1
Perylene-d12	103		70 - 130	04/05/24 09:13	04/07/24 17:05	1
Triphenylphosphate	96		70 - 130	04/05/24 09:13	04/07/24 17:05	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-89625-4

Date Collected: 04/01/24 10:13

Matrix: Drinking Water

Date Received: 04/03/24 10:10

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		04/05/24 09:13	04/07/24 15:44	1
2,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
2,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
2,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
4,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
4,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
4,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Acenaphthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Acenaphthylene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Acetochlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Alachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
alpha-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
alpha-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Anthracene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 15:44	1
Atrazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 15:44	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 15:44	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 15:44	1
beta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 15:44	1
Bromacil	<0.098	+	0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Butachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-89625-1
 SDG: 525.2

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-89625-4

Date Collected: 04/01/24 10:13

Matrix: Drinking Water

Date Received: 04/03/24 10:10

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Butylbenzylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 15:44	1
Chlorobenzilate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Chloroneb	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Chlorpyrifos	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Chrysene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 15:44	1
delta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 15:44	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Dieldrin	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 15:44	1
Diethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 15:44	1
Dimethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 15:44	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/05/24 09:13	04/07/24 15:44	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Endrin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Endrin aldehyde	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
EPTC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Fluoranthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Fluorene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
gamma-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Heptachlor	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 15:44	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Isophorone	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 15:44	1
Lindane	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 15:44	1
Malathion	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Methoxychlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Metolachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Molinate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Naphthalene	<0.29		0.29	ug/L		04/05/24 09:13	04/07/24 15:44	1
Parathion	<0.098	*+	0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Phenanthrene	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 15:44	1
Propachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Simazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Terbacil	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Terbutylazine	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1
Thiobencarb	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 15:44	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 15:44	1
trans-Nonachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 15:44	1
Trifluralin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 15:44	1

Client Sample Results

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

Job ID: 380-89625-1
 SDG: 525.2

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-89625-4

Date Collected: 04/01/24 10:13

Matrix: Drinking Water

Date Received: 04/03/24 10:10

PWSID Number: HI0000331

<u>Tentatively Identified Compound</u>	<u>Est. Result</u>	<u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>RT</u>	<u>CAS No.</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Unknown	2.0	TJ	ug/L		9.09	N/A	04/05/24 09:13	04/07/24 15:44	1
Unknown	1.5	TJ	ug/L		10.01	N/A	04/05/24 09:13	04/07/24 15:44	1
Unknown	0.90	TJ	ug/L		11.23	N/A	04/05/24 09:13	04/07/24 15:44	1
Unknown	2.4	TJ	ug/L		14.58	N/A	04/05/24 09:13	04/07/24 15:44	1
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>				<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
2-Nitro-m-xylene	104		70 - 130				04/05/24 09:13	04/07/24 15:44	1
Perylene-d12	101		70 - 130				04/05/24 09:13	04/07/24 15:44	1
Triphenylphosphate	110		70 - 130				04/05/24 09:13	04/07/24 15:44	1

Action Limit Summary

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-89625-1

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		Prep Type
				Limit	RL Method	
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 GULCH WELLS PUMP 2

Lab Sample ID: 380-89625-2

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		Prep Type
				Limit	RL Method	
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 1&2 (260) P2

Lab Sample ID: 380-89625-3

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		Prep Type
				Limit	RL Method	
Alachlor	<0.048		ug/L	2	0.048 525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048 525.2	Total/NA

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Action Limit Summary

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

Job ID: 380-89625-1
SDG: 525.2

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2
(Continued)
PWSID Number: HI0000331

Lab Sample ID: 380-89625-3

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
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)	<0.048		ug/L	0.2	0.048	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.039		ug/L	0.2	0.039	525.2	Total/NA
Methoxychlor	<0.097		ug/L	40	0.097	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	525.2	Total/NA

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
PWSID Number: HI0000331

Lab Sample ID: 380-89625-4

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

Surrogate Summary

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

Job ID: 380-89625-1
 SDG: 525.2

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)
380-89625-1	MOANALUA WELLS	99	103	104
380-89625-1 MS	MOANALUA WELLS	103	98	110
380-89625-2	AIEA GULCH WELLS PUMP 2	100	106	103
380-89625-3	AIEA WELLS PUMPS 1&2 (260) P2	98	103	96
380-89625-4	HALAWA WELLS UNITS 1 & 2 P1	104	101	110

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-89618-Y-1-A DU	Duplicate	105	100	123
LCS 380-84607/23-A	Lab Control Sample	101	98	103
LCSD 380-84607/24-A	Lab Control Sample Dup	102	103	117
MB 380-84607/21-A	Method Blank	100	100	106
MRL 380-84607/22-A	Lab Control Sample	99	98	100

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: 380-89625-1
SDG: 525.2

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

Lab Sample ID: MB 380-84607/21-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
4,4'-DDD	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
4,4'-DDE	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
4,4'-DDT	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Acenaphthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Acenaphthylene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Acetochlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Alachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
alpha-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
alpha-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Anthracene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 11:43	1
Atrazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 11:43	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 11:43	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 11:43	1
beta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 11:43	1
Bromacil	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Butachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 11:43	1
Chlorobenzilate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Chloroneb	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Chlorpyrifos	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Chrysene	<0.020		0.020	ug/L		04/05/24 09:13	04/07/24 11:43	1
delta-BHC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/05/24 09:13	04/07/24 11:43	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Dieldrin	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 11:43	1
Diethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 11:43	1
Dimethylphthalate	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 11:43	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/05/24 09:13	04/07/24 11:43	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Endrin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Endrin aldehyde	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
EPTC	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: MB 380-84607/21-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84607

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Fluorene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
gamma-Chlordane	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Heptachlor	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 11:43	1
Heptachlor epoxide (isomer B)	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Isophorone	<0.49		0.49	ug/L		04/05/24 09:13	04/07/24 11:43	1
Lindane	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 11:43	1
Malathion	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Methoxychlor	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Metolachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Molinate	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Naphthalene	<0.29		0.29	ug/L		04/05/24 09:13	04/07/24 11:43	1
Parathion	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Phenanthrene	<0.039		0.039	ug/L		04/05/24 09:13	04/07/24 11:43	1
Propachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Pyrene	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Simazine	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Terbacil	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Terbutylazine	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1
Thiobencarb	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 11:43	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/05/24 09:13	04/07/24 11:43	1
trans-Nonachlor	<0.049		0.049	ug/L		04/05/24 09:13	04/07/24 11:43	1
Trifluralin	<0.098		0.098	ug/L		04/05/24 09:13	04/07/24 11:43	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.778	T J	ug/L		11.22	N/A	04/05/24 09:13	04/07/24 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	100		70 - 130	04/05/24 09:13	04/07/24 11:43	1
Perylene-d12	100		70 - 130	04/05/24 09:13	04/07/24 11:43	1
Triphenylphosphate	106		70 - 130	04/05/24 09:13	04/07/24 11:43	1

Lab Sample ID: LCS 380-84607/23-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.95	2.11		ug/L		108	70 - 130
2,4'-DDD	1.95	2.04		ug/L		104	70 - 130
2,4'-DDE	1.95	2.15		ug/L		110	70 - 130
2,4'-DDT	1.95	2.21		ug/L		113	70 - 130
2,4-Dinitrotoluene	1.95	2.23		ug/L		114	70 - 130
2,6-Dinitrotoluene	1.95	2.17		ug/L		111	70 - 130
2-Methylnaphthalene	1.95	2.17		ug/L		111	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: LCS 380-84607/23-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.95	1.96		ug/L		101	70 - 130
4,4'-DDE	1.95	2.00		ug/L		103	70 - 130
4,4'-DDT	1.95	2.23		ug/L		114	70 - 130
Acenaphthene	1.95	1.90		ug/L		97	70 - 130
Acenaphthylene	1.95	1.87		ug/L		96	70 - 130
Acetochlor	1.95	1.94		ug/L		99	70 - 130
Alachlor	1.95	1.99		ug/L		102	70 - 130
alpha-BHC	1.95	2.10		ug/L		107	70 - 130
alpha-Chlordane	1.95	1.72		ug/L		88	70 - 130
Anthracene	1.95	1.47		ug/L		75	70 - 130
Atrazine	1.95	2.14		ug/L		110	70 - 130
Benz(a)anthracene	1.95	1.93		ug/L		99	70 - 130
Benzo[a]pyrene	1.95	1.78		ug/L		91	70 - 130
Benzo[b]fluoranthene	1.95	2.01		ug/L		103	70 - 130
Benzo[g,h,i]perylene	1.95	2.02		ug/L		104	70 - 130
Benzo[k]fluoranthene	1.95	2.12		ug/L		108	70 - 130
beta-BHC	1.95	2.11		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.73		ug/L		89	70 - 130
Bromacil	1.95	2.44		ug/L		125	70 - 130
Butachlor	1.95	1.98		ug/L		101	70 - 130
Butylbenzylphthalate	1.95	2.02		ug/L		104	70 - 130
Chlorobenzilate	1.95	2.19		ug/L		112	70 - 130
Chloroneb	1.95	2.15		ug/L		110	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	2.06		ug/L		105	70 - 130
Chlorpyrifos	1.95	2.32		ug/L		118	70 - 130
Chrysene	1.95	2.03		ug/L		104	70 - 130
delta-BHC	1.95	2.00		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	1.95	1.99		ug/L		102	70 - 130
Dibenz(a,h)anthracene	1.95	2.04		ug/L		104	70 - 130
Diclorvos (DDVP)	1.95	2.20		ug/L		112	70 - 130
Dieldrin	1.95	2.06		ug/L		105	70 - 130
Diethylphthalate	1.95	2.05		ug/L		105	70 - 130
Dimethylphthalate	1.95	1.99		ug/L		102	70 - 130
Di-n-butyl phthalate	3.91	4.63		ug/L		119	70 - 130
Di-n-octyl phthalate	1.95	1.91		ug/L		97	70 - 130
Endosulfan I (Alpha)	1.95	2.08		ug/L		106	70 - 130
Endosulfan II (Beta)	1.95	2.21		ug/L		113	70 - 130
Endosulfan sulfate	1.95	2.11		ug/L		108	70 - 130
Endrin	1.95	2.10		ug/L		107	70 - 130
Endrin aldehyde	1.95	1.92		ug/L		98	60 - 130
EPTC	1.95	2.27		ug/L		116	70 - 130
Fluoranthene	1.95	2.16		ug/L		111	70 - 130
Fluorene	1.95	2.06		ug/L		105	70 - 130
gamma-Chlordane	1.95	1.83		ug/L		93	70 - 130
Heptachlor	1.95	2.18		ug/L		111	70 - 130
Heptachlor epoxide (isomer B)	1.95	1.87		ug/L		96	70 - 130
Hexachlorobenzene	1.95	2.16		ug/L		110	70 - 130
Hexachlorocyclopentadiene	1.95	2.11		ug/L		108	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	2.04		ug/L		105	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: LCS 380-84607/23-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isophorone	1.95	1.86		ug/L		95	70 - 130
Lindane	1.95	2.16		ug/L		110	70 - 130
Malathion	1.95	2.03		ug/L		104	70 - 130
Methoxychlor	1.95	2.22		ug/L		113	70 - 130
Metolachlor	1.95	2.09		ug/L		107	70 - 130
Molinate	1.95	2.28		ug/L		117	70 - 130
Naphthalene	1.95	2.07		ug/L		106	70 - 130
Parathion	1.95	2.47		ug/L		126	70 - 130
Pendimethalin (Penoxaline)	1.95	2.28		ug/L		116	70 - 130
Phenanthrene	1.95	1.88		ug/L		96	70 - 130
Propachlor	1.95	2.21		ug/L		113	70 - 130
Pyrene	1.95	2.22		ug/L		114	70 - 130
Simazine	1.95	2.17		ug/L		111	70 - 130
Terbacil	1.95	2.21		ug/L		113	70 - 130
Terbutylazine	1.95	2.12		ug/L		109	70 - 130
Thiobencarb	1.95	1.98		ug/L		102	70 - 130
trans-Nonachlor	1.95	1.93		ug/L		99	70 - 130
Trifluralin	1.95	2.15		ug/L		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	103		70 - 130

Lab Sample ID: LCSD 380-84607/24-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.95	2.05		ug/L		105	70 - 130	3	20
2,4'-DDD	1.95	2.20		ug/L		113	70 - 130	8	20
2,4'-DDE	1.95	2.28		ug/L		117	70 - 130	6	20
2,4'-DDT	1.95	2.43		ug/L		125	70 - 130	9	20
2,4-Dinitrotoluene	1.95	2.26		ug/L		116	70 - 130	1	20
2,6-Dinitrotoluene	1.95	2.25		ug/L		115	70 - 130	4	20
2-Methylnaphthalene	1.95	2.12		ug/L		108	70 - 130	3	20
4,4'-DDD	1.95	2.13		ug/L		109	70 - 130	8	20
4,4'-DDE	1.95	2.10		ug/L		108	70 - 130	5	20
4,4'-DDT	1.95	2.46		ug/L		126	70 - 130	10	20
Acenaphthene	1.95	1.85		ug/L		95	70 - 130	3	20
Acenaphthylene	1.95	1.82		ug/L		93	70 - 130	3	20
Acetochlor	1.95	2.15		ug/L		110	70 - 130	10	20
Alachlor	1.95	2.18		ug/L		112	70 - 130	9	20
alpha-BHC	1.95	2.13		ug/L		109	70 - 130	1	20
alpha-Chlordane	1.95	1.91		ug/L		98	70 - 130	10	20
Anthracene	1.95	1.38		ug/L		71	70 - 130	7	20
Atrazine	1.95	2.16		ug/L		111	70 - 130	1	20
Benz(a)anthracene	1.95	2.07		ug/L		106	70 - 130	7	20

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: LCSD 380-84607/24-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	RPD Limit
							Limits	RPD		
Benzo[a]pyrene	1.95	1.88		ug/L		97	70 - 130	6	20	
Benzo[b]fluoranthene	1.95	2.12		ug/L		109	70 - 130	5	20	
Benzo[g,h,i]perylene	1.95	2.19		ug/L		112	70 - 130	8	20	
Benzo[k]fluoranthene	1.95	2.19		ug/L		112	70 - 130	3	20	
beta-BHC	1.95	2.18		ug/L		112	70 - 130	3	20	
Bis(2-ethylhexyl) phthalate	1.95	1.79		ug/L		92	70 - 130	3	20	
Bromacil	1.95	2.76	*+	ug/L		141	70 - 130	12	20	
Butachlor	1.95	2.20		ug/L		113	70 - 130	10	20	
Butylbenzylphthalate	1.95	2.23		ug/L		114	70 - 130	10	20	
Chlorobenzilate	1.95	2.44		ug/L		125	70 - 130	11	20	
Chloroneb	1.95	2.10		ug/L		108	70 - 130	2	20	
Chlorothalonil (Draconil, Bravo)	1.95	2.16		ug/L		111	70 - 130	5	20	
Chlorpyrifos	1.95	2.48		ug/L		127	70 - 130	7	20	
Chrysene	1.95	2.04		ug/L		105	70 - 130	0	20	
delta-BHC	1.95	2.08		ug/L		107	70 - 130	4	20	
Di(2-ethylhexyl)adipate	1.95	2.25		ug/L		115	70 - 130	12	20	
Dibenz(a,h)anthracene	1.95	2.16		ug/L		111	70 - 130	6	20	
Diclorvos (DDVP)	1.95	2.15		ug/L		110	70 - 130	2	20	
Dieldrin	1.95	2.28		ug/L		117	70 - 130	10	20	
Diethylphthalate	1.95	2.11		ug/L		108	70 - 130	3	20	
Dimethylphthalate	1.95	1.98		ug/L		102	70 - 130	1	20	
Di-n-butyl phthalate	3.90	4.94		ug/L		127	70 - 130	6	20	
Di-n-octyl phthalate	1.95	2.03		ug/L		104	70 - 130	6	20	
Endosulfan I (Alpha)	1.95	2.27		ug/L		116	70 - 130	9	20	
Endosulfan II (Beta)	1.95	2.43		ug/L		124	70 - 130	9	20	
Endosulfan sulfate	1.95	2.42		ug/L		124	70 - 130	14	20	
Endrin	1.95	2.49		ug/L		127	70 - 130	17	20	
Endrin aldehyde	1.95	2.16		ug/L		111	60 - 130	12	20	
EPTC	1.95	2.26		ug/L		116	70 - 130	1	20	
Fluoranthene	1.95	2.19		ug/L		112	70 - 130	1	20	
Fluorene	1.95	1.93		ug/L		99	70 - 130	7	20	
gamma-Chlordane	1.95	2.02		ug/L		103	70 - 130	10	20	
Heptachlor	1.95	2.34		ug/L		120	70 - 130	7	20	
Heptachlor epoxide (isomer B)	1.95	2.08		ug/L		107	70 - 130	11	20	
Hexachlorobenzene	1.95	2.11		ug/L		108	70 - 130	2	20	
Hexachlorocyclopentadiene	1.95	2.10		ug/L		108	70 - 130	0	20	
Indeno[1,2,3-cd]pyrene	1.95	2.19		ug/L		112	70 - 130	7	20	
Isophorone	1.95	1.89		ug/L		97	70 - 130	2	20	
Lindane	1.95	2.22		ug/L		114	70 - 130	3	20	
Malathion	1.95	2.24		ug/L		115	70 - 130	9	20	
Methoxychlor	1.95	2.32		ug/L		119	70 - 130	5	20	
Metolachlor	1.95	2.28		ug/L		117	70 - 130	9	20	
Molinate	1.95	2.29		ug/L		117	70 - 130	0	20	
Naphthalene	1.95	2.03		ug/L		104	70 - 130	2	20	
Parathion	1.95	2.70	*+	ug/L		138	70 - 130	9	20	
Pendimethalin (Penoxaline)	1.95	2.51		ug/L		128	70 - 130	10	20	
Phenanthrene	1.95	1.81		ug/L		93	70 - 130	4	20	
Propachlor	1.95	2.32		ug/L		119	70 - 130	5	20	
Pyrene	1.95	2.25		ug/L		116	70 - 130	2	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: LCSD 380-84607/24-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Simazine	1.95	2.16		ug/L		111	70 - 130	1	20
Terbacil	1.95	2.37		ug/L		121	70 - 130	7	20
Terbuthylazine	1.95	2.21		ug/L		113	70 - 130	4	20
Thiobencarb	1.95	2.04		ug/L		104	70 - 130	3	20
trans-Nonachlor	1.95	2.16		ug/L		111	70 - 130	11	20
Trifluralin	1.95	2.35		ug/L		120	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2-Nitro-m-xylene	102		70 - 130
Perylene-d12	103		70 - 130
Triphenylphosphate	117		70 - 130

Lab Sample ID: MRL 380-84607/22-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0977	0.116		ug/L		119	50 - 150
2,4'-DDD	0.0977	0.108		ug/L		111	50 - 150
2,4'-DDE	0.0977	0.0857	J	ug/L		88	50 - 150
2,4'-DDT	0.0977	0.0919	J	ug/L		94	50 - 150
2,4-Dinitrotoluene	0.0977	0.0983		ug/L		101	50 - 150
2,6-Dinitrotoluene	0.0977	0.108		ug/L		110	50 - 150
2-Methylnaphthalene	0.0977	0.110		ug/L		113	50 - 150
4,4'-DDD	0.0977	0.0822	J	ug/L		84	50 - 150
4,4'-DDE	0.0977	0.0761	J	ug/L		78	50 - 150
4,4'-DDT	0.0977	0.109		ug/L		111	50 - 150
Acenaphthene	0.0977	0.0998		ug/L		102	50 - 150
Acenaphthylene	0.0977	0.0983		ug/L		101	50 - 150
Acetochlor	0.0488	0.0462	J	ug/L		95	50 - 150
Alachlor	0.0488	0.0491		ug/L		101	50 - 150
alpha-BHC	0.0977	0.109		ug/L		112	50 - 150
alpha-Chlordane	0.0244	<0.028		ug/L		82	50 - 150
Anthracene	0.0195	<0.019		ug/L		86	50 - 150
Atrazine	0.0488	0.0483	J	ug/L		99	50 - 150
Benz(a)anthracene	0.0488	0.0554		ug/L		113	50 - 150
Benzo[a]pyrene	0.0195	0.0116	J	ug/L		59	50 - 150
Benzo[b]fluoranthene	0.0195	0.0155	J	ug/L		80	50 - 150
Benzo[g,h,i]perylene	0.0488	0.0475	J	ug/L		97	50 - 150
Benzo[k]fluoranthene	0.0195	<0.017		ug/L		77	50 - 150
beta-BHC	0.0977	0.113		ug/L		116	50 - 150
Bis(2-ethylhexyl) phthalate	0.586	0.577	J	ug/L		98	50 - 150
Bromacil	0.0977	0.119		ug/L		122	50 - 150
Butachlor	0.0488	0.0505		ug/L		103	50 - 150
Butylbenzylphthalate	0.146	0.153	J	ug/L		105	50 - 150
Chlorobenzilate	0.0977	0.109		ug/L		111	50 - 150
Chloroneb	0.0977	0.0973	J	ug/L		100	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0977	0.103		ug/L		106	50 - 150

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: MRL 380-84607/22-A
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorpyrifos	0.0488	0.0527		ug/L		108	50 - 150
Chrysene	0.0195	0.0248		ug/L		127	50 - 150
delta-BHC	0.0977	0.118		ug/L		120	50 - 150
Di(2-ethylhexyl)adipate	0.293	0.296	J	ug/L		101	50 - 150
Dibenz(a,h)anthracene	0.0488	0.0456	J	ug/L		93	50 - 150
Diclorvos (DDVP)	0.0488	0.0615		ug/L		126	50 - 150
Dieldrin	0.0977	0.0967	J	ug/L		99	50 - 150
Diethylphthalate	0.146	0.171	J	ug/L		117	50 - 150
Dimethylphthalate	0.293	0.309	J	ug/L		105	50 - 150
Di-n-butyl phthalate	0.293	0.308	J	ug/L		105	49 - 243
Di-n-octyl phthalate	0.0977	0.0666	J	ug/L		68	50 - 150
Endosulfan I (Alpha)	0.0977	0.104		ug/L		107	50 - 150
Endosulfan II (Beta)	0.0977	0.102		ug/L		104	50 - 150
Endosulfan sulfate	0.0977	0.0983		ug/L		101	50 - 150
Endrin	0.0977	0.0967	J	ug/L		99	50 - 150
Endrin aldehyde	0.0977	0.0935	J	ug/L		96	50 - 150
EPTC	0.0977	0.100		ug/L		102	50 - 150
Fluoranthene	0.0488	0.0504	J	ug/L		103	50 - 150
Fluorene	0.0488	0.0497		ug/L		102	50 - 150
gamma-Chlordane	0.0244	0.0211	J	ug/L		87	50 - 150
Heptachlor	0.0391	0.0493		ug/L		126	50 - 150
Heptachlor epoxide (isomer B)	0.0488	0.0505		ug/L		104	50 - 150
Hexachlorobenzene	0.0488	0.0498		ug/L		102	50 - 150
Hexachlorocyclopentadiene	0.0488	0.0520		ug/L		106	50 - 150
Indeno[1,2,3-cd]pyrene	0.0488	0.0476	J	ug/L		97	50 - 150
Isophorone	0.0977	0.105	J	ug/L		108	50 - 150
Lindane	0.0391	0.0460		ug/L		118	50 - 150
Malathion	0.0977	0.104		ug/L		107	50 - 150
Methoxychlor	0.0977	0.106		ug/L		108	50 - 150
Metolachlor	0.0488	0.0602		ug/L		123	50 - 150
Molinate	0.0977	0.107		ug/L		110	50 - 150
Naphthalene	0.0977	0.112	J	ug/L		115	50 - 150
Parathion	0.0977	0.0980		ug/L		100	50 - 150
Pendimethalin (Penoxaline)	0.0977	0.103		ug/L		106	50 - 150
Phenanthrene	0.0195	0.0202	J	ug/L		103	50 - 150
Propachlor	0.0488	0.0498		ug/L		102	50 - 150
Pyrene	0.0488	0.0487	J	ug/L		100	50 - 150
Simazine	0.0488	0.0545		ug/L		112	50 - 150
Terbacil	0.0977	0.113		ug/L		116	50 - 150
Terbutylazine	0.0977	0.100		ug/L		103	50 - 150
Thiobencarb	0.0977	0.114	J	ug/L		117	50 - 150
trans-Nonachlor	0.0244	0.0264	J	ug/L		108	50 - 150
Trifluralin	0.0977	0.106		ug/L		108	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	MRL Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	100		70 - 130

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: 380-89625-1 MS
Matrix: Drinking Water
Analysis Batch: 84782

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.95	2.03		ug/L		104	70 - 130
2,4'-DDD	<0.098		1.95	2.09		ug/L		107	70 - 130
2,4'-DDE	<0.098		1.95	2.15		ug/L		110	70 - 130
2,4'-DDT	<0.098		1.95	2.19		ug/L		112	70 - 130
2,4-Dinitrotoluene	<0.098		1.95	2.11		ug/L		108	70 - 130
2,6-Dinitrotoluene	<0.098		1.95	2.09		ug/L		107	70 - 130
2-Methylnaphthalene	<0.098		1.95	2.11		ug/L		108	70 - 130
4,4'-DDD	<0.098		1.95	1.98		ug/L		102	70 - 130
4,4'-DDE	<0.098		1.95	1.90		ug/L		98	70 - 130
4,4'-DDT	<0.098		1.95	2.21		ug/L		113	70 - 130
Acenaphthene	<0.098		1.95	1.83		ug/L		94	70 - 130
Acenaphthylene	<0.098		1.95	1.79		ug/L		92	70 - 130
Acetochlor	<0.098		1.95	2.05		ug/L		105	70 - 130
Alachlor	<0.049		1.95	2.04		ug/L		105	70 - 130
alpha-BHC	<0.098		1.95	2.04		ug/L		105	70 - 130
alpha-Chlordane	<0.049		1.95	1.77		ug/L		91	70 - 130
Anthracene	<0.020	F1	1.95	0.958	F1	ug/L		49	70 - 130
Atrazine	<0.049		1.95	2.13		ug/L		109	70 - 130
Benz(a)anthracene	<0.049		1.95	1.90		ug/L		98	70 - 130
Benzo[a]pyrene	<0.020		1.95	1.62		ug/L		83	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	1.96		ug/L		100	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	2.02		ug/L		103	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.11		ug/L		108	70 - 130
beta-BHC	<0.098		1.95	2.11		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.95	1.52		ug/L		78	70 - 130
Bromacil	<0.098	F1 **	1.95	2.55	F1	ug/L		131	70 - 130
Butachlor	<0.049		1.95	2.04		ug/L		105	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.07		ug/L		106	70 - 130
Chlorobenzilate	<0.098		1.95	2.28		ug/L		117	70 - 130
Chloroneb	<0.098		1.95	2.06		ug/L		106	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.09		ug/L		107	70 - 130
Chlorpyrifos	<0.049		1.95	2.36		ug/L		121	70 - 130
Chrysene	<0.020		1.95	2.00		ug/L		103	70 - 130
delta-BHC	<0.098		1.95	1.99		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.95	1.89		ug/L		97	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	1.95		ug/L		100	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.11		ug/L		108	70 - 130
Dieldrin	<0.20		1.95	2.13		ug/L		109	70 - 130
Diethylphthalate	<0.49		1.95	2.02		ug/L		104	70 - 130
Dimethylphthalate	<0.49		1.95	1.93		ug/L		99	70 - 130
Di-n-butyl phthalate	<0.98		3.90	4.76		ug/L		122	70 - 130
Di-n-octyl phthalate	<0.098		1.95	1.64		ug/L		84	70 - 130
Endosulfan I (Alpha)	<0.098		1.95	2.13		ug/L		109	70 - 130
Endosulfan II (Beta)	<0.098		1.95	2.34		ug/L		120	70 - 130
Endosulfan sulfate	<0.098		1.95	2.21		ug/L		113	70 - 130
Endrin	<0.098		1.95	2.18		ug/L		112	70 - 130
Endrin aldehyde	<0.098		1.95	2.04		ug/L		104	60 - 130
EPTC	<0.098		1.95	2.22		ug/L		114	70 - 130

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: 380-89625-1 MS
Matrix: Drinking Water
Analysis Batch: 84782

Client Sample ID: MOANALUA WELLS
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Fluoranthene	<0.098		1.95	2.14		ug/L		110	70 - 130
Fluorene	<0.049		1.95	1.93		ug/L		99	70 - 130
gamma-Chlordane	<0.049		1.95	1.87		ug/L		96	70 - 130
Heptachlor	<0.039		1.95	2.23		ug/L		115	70 - 130
Heptachlor epoxide (isomer B)	<0.049		1.95	1.99		ug/L		102	70 - 130
Hexachlorobenzene	<0.049		1.95	2.07		ug/L		106	70 - 130
Hexachlorocyclopentadiene	<0.049		1.95	2.05		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.95	1.98		ug/L		101	70 - 130
Isophorone	<0.49		1.95	1.86		ug/L		95	70 - 130
Lindane	<0.039		1.95	2.14		ug/L		110	70 - 130
Malathion	<0.098		1.95	2.03		ug/L		104	70 - 130
Methoxychlor	<0.098		1.95	2.17		ug/L		111	70 - 130
Metolachlor	<0.049		1.95	2.17		ug/L		111	70 - 130
Molinate	<0.098		1.95	2.21		ug/L		113	70 - 130
Naphthalene	<0.29		1.95	2.04		ug/L		105	70 - 130
Parathion	<0.098	+	1.95	2.48		ug/L		127	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.95	2.26		ug/L		116	70 - 130
Phenanthrene	<0.039		1.95	1.82		ug/L		93	70 - 130
Propachlor	<0.049		1.95	2.21		ug/L		113	70 - 130
Pyrene	<0.049		1.95	2.19		ug/L		112	70 - 130
Simazine	<0.049		1.95	2.11		ug/L		108	70 - 130
Terbacil	<0.098		1.95	2.27		ug/L		116	70 - 130
Terbutylazine	<0.098		1.95	2.09		ug/L		107	70 - 130
Thiobencarb	<0.20		1.95	1.99		ug/L		102	70 - 130
trans-Nonachlor	<0.049		1.95	1.94		ug/L		100	70 - 130
Trifluralin	<0.098		1.95	2.11		ug/L		108	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	103		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	110		70 - 130

Lab Sample ID: 380-89618-Y-1-A DU
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.096		<0.098		ug/L		NC	20
2,4'-DDD	<0.096		<0.098		ug/L		NC	20
2,4'-DDE	<0.096		<0.098		ug/L		NC	20
2,4'-DDT	<0.096		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.096		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.096		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.096		<0.098		ug/L		NC	20
4,4'-DDD	<0.096		<0.098		ug/L		NC	20
4,4'-DDE	<0.096		<0.098		ug/L		NC	20
4,4'-DDT	<0.096		<0.098		ug/L		NC	20
Acenaphthene	<0.096		<0.098		ug/L		NC	20

QC Sample Results

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

Job ID: 380-89625-1
SDG: 525.2

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

Lab Sample ID: 380-89618-Y-1-A DU
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Acenaphthylene	<0.096		<0.098		ug/L		NC	20
Acetochlor	<0.096		<0.098		ug/L		NC	20
Alachlor	<0.048		<0.049		ug/L		NC	20
alpha-BHC	<0.096		<0.098		ug/L		NC	20
alpha-Chlordane	<0.048		<0.049		ug/L		NC	20
Anthracene	<0.019		<0.020		ug/L		NC	20
Atrazine	<0.048		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.048		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.048		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.020		ug/L		NC	20
beta-BHC	<0.096		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.59		ug/L		NC	20
Bromacil	<0.096	*+	<0.098	*+	ug/L		NC	20
Butachlor	<0.048		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.48		<0.49		ug/L		NC	20
Chlorobenzilate	<0.096		<0.098		ug/L		NC	20
Chloroneb	<0.096		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.096		<0.098		ug/L		NC	20
Chlorpyrifos	<0.048		<0.049		ug/L		NC	20
Chrysene	<0.019		<0.020		ug/L		NC	20
delta-BHC	<0.096		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.048		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.048		<0.049		ug/L		NC	20
Dieldrin	<0.19		<0.20		ug/L		NC	20
Diethylphthalate	<0.48		<0.49		ug/L		NC	20
Dimethylphthalate	<0.48		<0.49		ug/L		NC	20
Di-n-butyl phthalate	2.0		2.17		ug/L		8	20
Di-n-octyl phthalate	<0.096		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.096		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.096		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.096		<0.098		ug/L		NC	20
Endrin	<0.096		<0.098		ug/L		NC	20
Endrin aldehyde	<0.096		<0.098		ug/L		NC	20
EPTC	<0.096		<0.098		ug/L		NC	20
Fluoranthene	<0.096		<0.098		ug/L		NC	20
Fluorene	<0.048		<0.049		ug/L		NC	20
gamma-Chlordane	<0.048		<0.049		ug/L		NC	20
Heptachlor	<0.039		<0.039		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.048		<0.049		ug/L		NC	20
Hexachlorobenzene	<0.048		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.048		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.048		<0.049		ug/L		NC	20
Isophorone	<0.48		<0.49		ug/L		NC	20
Lindane	<0.039		<0.039		ug/L		NC	20
Malathion	<0.096		<0.098		ug/L		NC	20
Methoxychlor	<0.096		<0.098		ug/L		NC	20

QC Sample Results

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

Job ID: 380-89625-1
 SDG: 525.2

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

Lab Sample ID: 380-89618-Y-1-A DU
Matrix: Water
Analysis Batch: 84782

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 84607

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Metolachlor	<0.048		<0.049		ug/L		NC	20
Molinate	<0.096		<0.098		ug/L		NC	20
Naphthalene	<0.29		<0.29		ug/L		NC	20
Parathion	<0.096	*+	<0.098	*+	ug/L		NC	20
Pendimethalin (Penoxaline)	<0.096		<0.098		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.048		<0.049		ug/L		NC	20
Pyrene	<0.048		<0.049		ug/L		NC	20
Simazine	<0.048		<0.049		ug/L		NC	20
Terbacil	<0.096		<0.098		ug/L		NC	20
Terbutylazine	<0.096		<0.098		ug/L		NC	20
Thiobencarb	<0.19		<0.20		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.20		ug/L		NC	20
trans-Nonachlor	<0.048		<0.049		ug/L		NC	20
Trifluralin	<0.096		<0.098		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	105		70 - 130
Perylene-d12	100		70 - 130
Triphenylphosphate	123		70 - 130

QC Association Summary

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

Job ID: 380-89625-1
 SDG: 525.2

GC/MS Semi VOA

Prep Batch: 84607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-89625-1	MOANALUA WELLS	Total/NA	Drinking Water	525.2	
380-89625-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	
380-89625-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	
380-89625-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	
MB 380-84607/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-84607/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-84607/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-84607/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-89625-1 MS	MOANALUA WELLS	Total/NA	Drinking Water	525.2	
380-89618-Y-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 84782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-89625-1	MOANALUA WELLS	Total/NA	Drinking Water	525.2	84607
380-89625-2	AIEA GULCH WELLS PUMP 2	Total/NA	Drinking Water	525.2	84607
380-89625-3	AIEA WELLS PUMPS 1&2 (260) P2	Total/NA	Drinking Water	525.2	84607
380-89625-4	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	84607
MB 380-84607/21-A	Method Blank	Total/NA	Water	525.2	84607
LCS 380-84607/23-A	Lab Control Sample	Total/NA	Water	525.2	84607
LCSD 380-84607/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	84607
MRL 380-84607/22-A	Lab Control Sample	Total/NA	Water	525.2	84607
380-89625-1 MS	MOANALUA WELLS	Total/NA	Drinking Water	525.2	84607
380-89618-Y-1-A DU	Duplicate	Total/NA	Water	525.2	84607

Lab Chronicle

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

Job ID: 380-89625-1
 SDG: 525.2

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-89625-1

Date Collected: 04/01/24 09:48

Matrix: Drinking Water

Date Received: 04/03/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			84607	OTM3	EA POM	04/05/24 09:13
Total/NA	Analysis	525.2		1	84782	Q8LA	EA POM	04/07/24 12:23

Client Sample ID: AIEA GULCH WELLS PUMP 2

Lab Sample ID: 380-89625-2

Date Collected: 04/01/24 10:41

Matrix: Drinking Water

Date Received: 04/03/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			84607	OTM3	EA POM	04/05/24 09:13
Total/NA	Analysis	525.2		1	84782	Q8LA	EA POM	04/07/24 16:04

Client Sample ID: AIEA WELLS PUMPS 1&2 (260) P2

Lab Sample ID: 380-89625-3

Date Collected: 04/01/24 11:10

Matrix: Drinking Water

Date Received: 04/03/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			84607	OTM3	EA POM	04/05/24 09:13
Total/NA	Analysis	525.2		1	84782	Q8LA	EA POM	04/07/24 17:05

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-89625-4

Date Collected: 04/01/24 10:13

Matrix: Drinking Water

Date Received: 04/03/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			84607	OTM3	EA POM	04/05/24 09:13
Total/NA	Analysis	525.2		1	84782	Q8LA	EA POM	04/07/24 15:44

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: 380-89625-1
 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	02-12-24 *

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 renewal pending - accreditation/certification considered valid.

Accreditation/Certification Summary

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

Job ID: 380-89625-1
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

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

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

Job ID: 380-89625-1
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: 380-89625-1
SDG: 525.2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-89625-1	MOANALUA WELLS	Drinking Water	04/01/24 09:48	04/03/24 10:10	HI0000331
380-89625-2	AIEA GULCH WELLS PUMP 2	Drinking Water	04/01/24 10:41	04/03/24 10:10	HI0000331
380-89625-3	AIEA WELLS PUMPS 1&2 (260) P2	Drinking Water	04/01/24 11:10	04/03/24 10:10	HI0000331
380-89625-4	HALAWA WELLS UNITS 1 & 2 P1	Drinking Water	04/01/24 10:13	04/03/24 10:10	HI0000331

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Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-89625-1

SDG Number: 525.2

Login Number: 89625

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.	False	Refer to NCM for affected item(s).
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	

