

ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/25/2024 2:41:15 PM

JOB DESCRIPTION

RED-HILL
Weekly
RUSH Weekly Red Hill

JOB NUMBER

380-109664-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



Generated
9/25/2024 2:41:15 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	12
Surrogate Summary	13
QC Sample Results	15
QC Association Summary	26
Lab Chronicle	27
Certification Summary	28
Method Summary	30
Sample Summary	31
Chain of Custody	32
Receipt Checklists	34

Definitions/Glossary

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

Job ID: 380-109664-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
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.
▫	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: 380-109664-1

Job ID: 380-109664-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-109664-1

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

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

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

Receipt

The samples were received on 8/21/2024 9:51 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 1.5°C, 2.4°C, 2.6°C and 3.4°C.

GC/MS Semi VOA

Method 625.1_SIM: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-474283 and analytical batch 570-476195 recovered outside control limits for multiple compounds. A re-prep/re-ran was performed and the LCS/LCSD failed low on 2nd attempt. The sample HT expired therefore, no re-extraction. The data excluded due to this QC failure.

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

Gasoline Range Organics

Method 8015B GRO LL: The trip blank associated with MOANALUA WELLS (331-223-TP202) indicated a detection above the reporting limit (RL): GRO. Data excluded, associated field sample showed ND for GRO. TB: MOANALUA WELLS (331-223-TP202) (380-109664-2)

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

Diesel Range Organics

Method 8015B: The results for C10-C24, C10-C28, C24-C36 in the following samples are suspected to be due to laboratory contamination. MOANALUA WELLS (331-223-TP202) (380-109664-1) and HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065) (380-109664-3). Data excluded due to this.

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

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-109664-1
SDG: Weekly

Client Sample ID: MOANALUA WELLS (331-223-TP202)
PWSID Number: HI0000331

Lab Sample ID: 380-109664-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.025		0.0098	ug/L	1		525.2	Total/NA

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)
PWSID Number: HI0000331

Lab Sample ID: 380-109664-3

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.037		0.0097	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.015		0.0097	ug/L	1		525.2	Total/NA

Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2
(331-206-TP065)

Lab Sample ID: 380-109664-4

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona



Client Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-109664-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 15:50	08/25/24 15:37	1
2,4'-DDD	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
2,4'-DDE	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
2,4'-DDT	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
2-Methylnaphthalene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
4,4'-DDD	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
4,4'-DDE	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
4,4'-DDT	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Acenaphthene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Acenaphthylene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Acetochlor	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Alachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
alpha-BHC	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
alpha-Chlordane	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Anthracene	<0.020		0.020	ug/L		08/22/24 15:50	08/25/24 15:37	1
Atrazine	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Benzo[a]pyrene	<0.020		0.020	ug/L		08/22/24 15:50	08/25/24 15:37	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		08/22/24 15:50	08/25/24 15:37	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		08/22/24 15:50	08/25/24 15:37	1
beta-BHC	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		08/22/24 15:50	08/25/24 15:37	1
Bromacil	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Butachlor	<0.049	^3+	0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:37	1
Chlorobenzilate	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Chloroneb	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Chlorpyrifos	<0.049	^3+	0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Chrysene	<0.020		0.020	ug/L		08/22/24 15:50	08/25/24 15:37	1
delta-BHC	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		08/22/24 15:50	08/25/24 15:37	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Dieldrin	0.025		0.0098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Diethylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:37	1
Dimethylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:37	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		08/22/24 15:50	08/25/24 15:37	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Endosulfan sulfate	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Endrin	<0.0098		0.0098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Endrin aldehyde	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
EPTC	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Fluoranthene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-109664-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 15:50	08/25/24 15:37	1
gamma-Chlordane	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Heptachlor	<0.0098		0.0098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Isophorone	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Lindane	<0.0098	^3+	0.0098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Malathion	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Methoxychlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Metolachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Molinate	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Naphthalene	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Parathion	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Phenanthrene	<0.039		0.039	ug/L		08/22/24 15:50	08/25/24 15:37	1
Propachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Pyrene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Simazine	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Terbacil	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Terbutylazine	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Thiobencarb	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		08/22/24 15:50	08/25/24 15:37	1
trans-Nonachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:37	1
Trifluralin	<0.098		0.098	ug/L		08/22/24 15:50	08/25/24 15:37	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.54	T J	ug/L		3.83	N/A	08/22/24 15:50	08/25/24 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	08/22/24 15:50	08/25/24 15:37	1
Perylene-d12	98		70 - 130	08/22/24 15:50	08/25/24 15:37	1
Triphenylphosphate	110		70 - 130	08/22/24 15:50	08/25/24 15:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/27/24 22:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		38 - 134		08/27/24 22:28	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)

Lab Sample ID: 380-109664-3

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

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		08/22/24 15:50	08/25/24 15:58	1
2,4'-DDD	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)**

Lab Sample ID: 380-109664-3

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDE	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
2,4'-DDT	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
2-Methylnaphthalene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
4,4'-DDD	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
4,4'-DDE	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
4,4'-DDT	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Acenaphthene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Acenaphthylene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Acetochlor	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Alachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
alpha-BHC	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
alpha-Chlordane	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Anthracene	<0.019		0.019	ug/L		08/22/24 15:50	08/25/24 15:58	1
Atrazine	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Benzo[a]pyrene	<0.019		0.019	ug/L		08/22/24 15:50	08/25/24 15:58	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		08/22/24 15:50	08/25/24 15:58	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		08/22/24 15:50	08/25/24 15:58	1
beta-BHC	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		08/22/24 15:50	08/25/24 15:58	1
Bromacil	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Butachlor	<0.049	^3+	0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:58	1
Chlorobenzilate	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Chloroneb	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Chlorpyrifos	<0.049	^3+	0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Chrysene	<0.019		0.019	ug/L		08/22/24 15:50	08/25/24 15:58	1
delta-BHC	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		08/22/24 15:50	08/25/24 15:58	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Dieldrin	0.037		0.0097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Diethylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:58	1
Dimethylphthalate	<0.49		0.49	ug/L		08/22/24 15:50	08/25/24 15:58	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		08/22/24 15:50	08/25/24 15:58	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Endosulfan sulfate	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Endrin	<0.0097		0.0097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Endrin aldehyde	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
EPTC	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Fluoranthene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Fluorene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)**

Lab Sample ID: 380-109664-3

Date Collected: 08/19/24 10:07
Date Received: 08/21/24 09:51

Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-Chlordane	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Heptachlor	<0.0097		0.0097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Heptachlor epoxide (isomer B)	0.015		0.0097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Isophorone	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Lindane	<0.0097	^3+	0.0097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Malathion	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Methoxychlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Metolachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Molinate	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Naphthalene	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Parathion	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Phenanthrene	<0.039		0.039	ug/L		08/22/24 15:50	08/25/24 15:58	1
Propachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Pyrene	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Simazine	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Terbacil	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Terbutylazine	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Thiobencarb	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		08/22/24 15:50	08/25/24 15:58	1
trans-Nonachlor	<0.049		0.049	ug/L		08/22/24 15:50	08/25/24 15:58	1
Trifluralin	<0.097		0.097	ug/L		08/22/24 15:50	08/25/24 15:58	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	08/22/24 15:50	08/25/24 15:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	08/22/24 15:50	08/25/24 15:58	1
Perylene-d12	95		70 - 130	08/22/24 15:50	08/25/24 15:58	1
Triphenylphosphate	109		70 - 130	08/22/24 15:50	08/25/24 15:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/27/24 22:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		38 - 134		08/27/24 22:51	1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2
(331-206-TP065)**

Lab Sample ID: 380-109664-4

Date Collected: 08/19/24 10:07
Date Received: 08/21/24 09:51

Matrix: Water

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/27/24 20:08	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2
(331-206-TP065)**

Lab Sample ID: 380-109664-4

Date Collected: 08/19/24 10:07

Matrix: Water

Date Received: 08/21/24 09:51

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
4-Bromofluorobenzene (Surr)	88		38 - 134		08/27/24 20:08	1

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

Action Limit Summary

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

Job ID: 380-109664-1
SDG: Weekly

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-109664-1

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	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098	^3+	ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
(331-206-TP065)**

Lab Sample ID: 380-109664-3

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	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0097		ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	0.015		ug/L	0.2	0.0097	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0097	^3+	ug/L	0.2	0.0097	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA

Surrogate Summary

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

Job ID: 380-109664-1
SDG: Weekly

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-109664-1	MOANALUA WELLS (331-223-T	97	98	110
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	96	95	109

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)
380-109074-AF-1-A MS	Matrix Spike	97	100	117
380-109626-AE-1-A DU	Duplicate	98	99	113
LCS 380-104921/23-A	Lab Control Sample	96	101	115
MB 380-104921/21-A	Method Blank	97	91	109
MRL 380-104921/22-A	Lab Control Sample	97	99	115

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-109664-1	MOANALUA WELLS (331-223-T	84
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	80
380-109664-3 MS	HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	86
380-109664-3 MSD	HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	92

Surrogate Legend
 BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-109664-4	TB: HALAWA WELLS UNITS 1 & 2	88
LCS 570-474932/1008	Lab Control Sample	88
LCSD 570-474932/9	Lab Control Sample Dup	93
MB 570-474932/11	Method Blank	90

Surrogate Summary

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

Job ID: 380-109664-1
SDG: Weekly

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
MRL 570-474932/10	Lab Control Sample	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: MB 380-104921/21-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104921

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2,4'-DDD	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2,4'-DDE	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2,4'-DDT	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
2-Methylnaphthalene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
4,4'-DDD	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
4,4'-DDE	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
4,4'-DDT	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Acenaphthene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Acenaphthylene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Acetochlor	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Alachlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
alpha-BHC	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
alpha-Chlordane	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Anthracene	<0.020		0.020	ug/L		08/22/24 14:30	08/25/24 10:47	1
Atrazine	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Benzo[a]pyrene	<0.020		0.020	ug/L		08/22/24 14:30	08/25/24 10:47	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		08/22/24 14:30	08/25/24 10:47	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		08/22/24 14:30	08/25/24 10:47	1
beta-BHC	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		08/22/24 14:30	08/25/24 10:47	1
Bromacil	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Butachlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/22/24 14:30	08/25/24 10:47	1
Chlorobenzilate	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Chloroneb	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Chlorpyrifos	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Chrysene	<0.020		0.020	ug/L		08/22/24 14:30	08/25/24 10:47	1
delta-BHC	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		08/22/24 14:30	08/25/24 10:47	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Dieldrin	<0.0099		0.0099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Diethylphthalate	<0.49		0.49	ug/L		08/22/24 14:30	08/25/24 10:47	1
Dimethylphthalate	<0.49		0.49	ug/L		08/22/24 14:30	08/25/24 10:47	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		08/22/24 14:30	08/25/24 10:47	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Endosulfan sulfate	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Endrin	<0.0099		0.0099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Endrin aldehyde	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
EPTC	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: MB 380-104921/21-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 104921

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Fluorene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
gamma-Chlordane	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Heptachlor	<0.0099		0.0099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Isophorone	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Lindane	<0.0099		0.0099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Malathion	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Methoxychlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Metolachlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Molinate	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Naphthalene	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Parathion	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Phenanthrene	<0.040		0.040	ug/L		08/22/24 14:30	08/25/24 10:47	1
Propachlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Pyrene	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Simazine	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Terbacil	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Terbutylazine	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Thiobencarb	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		08/22/24 14:30	08/25/24 10:47	1
trans-Nonachlor	<0.049		0.049	ug/L		08/22/24 14:30	08/25/24 10:47	1
Trifluralin	<0.099		0.099	ug/L		08/22/24 14:30	08/25/24 10:47	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	08/22/24 14:30	08/25/24 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	08/22/24 14:30	08/25/24 10:47	1
Perylene-d12	91		70 - 130	08/22/24 14:30	08/25/24 10:47	1
Triphenylphosphate	109		70 - 130	08/22/24 14:30	08/25/24 10:47	1

Lab Sample ID: LCS 380-104921/23-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.94	1.85		ug/L		95	70 - 130
2,4'-DDD	1.94	2.11		ug/L		109	70 - 130
2,4'-DDE	1.94	2.04		ug/L		105	70 - 130
2,4'-DDT	1.94	1.89		ug/L		97	70 - 130
2,4-Dinitrotoluene	1.94	1.88		ug/L		97	70 - 130
2,6-Dinitrotoluene	1.94	1.86		ug/L		96	70 - 130
2-Methylnaphthalene	1.94	1.86		ug/L		96	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: LCS 380-104921/23-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.94	1.95		ug/L		100	70 - 130
4,4'-DDE	1.94	2.23		ug/L		115	70 - 130
4,4'-DDT	1.94	1.88		ug/L		97	70 - 130
Acenaphthene	1.94	1.87		ug/L		96	70 - 130
Acenaphthylene	1.94	2.00		ug/L		103	70 - 130
Acetochlor	1.94	2.12		ug/L		109	70 - 130
Alachlor	1.94	2.18		ug/L		112	70 - 130
alpha-BHC	1.94	2.01		ug/L		103	70 - 130
alpha-Chlordane	1.94	2.09		ug/L		108	70 - 130
Anthracene	1.94	1.76		ug/L		90	70 - 130
Atrazine	1.94	1.98		ug/L		102	70 - 130
Benz(a)anthracene	1.94	2.07		ug/L		107	70 - 130
Benzo[a]pyrene	1.94	1.90		ug/L		98	70 - 130
Benzo[b]fluoranthene	1.94	2.08		ug/L		107	70 - 130
Benzo[g,h,i]perylene	1.94	1.92		ug/L		99	70 - 130
Benzo[k]fluoranthene	1.94	2.17		ug/L		112	70 - 130
beta-BHC	1.94	2.00		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	1.94	1.95		ug/L		100	70 - 130
Bromacil	1.94	1.89		ug/L		97	70 - 130
Butachlor	1.94	2.04		ug/L		105	70 - 130
Butylbenzylphthalate	1.94	2.04		ug/L		105	70 - 130
Chlorobenzilate	1.94	2.10		ug/L		108	70 - 130
Chloroneb	1.94	2.16		ug/L		111	70 - 130
Chlorothalonil (Draconil, Bravo)	1.94	2.15		ug/L		111	70 - 130
Chlorpyrifos	1.94	1.93		ug/L		99	70 - 130
Chrysene	1.94	2.04		ug/L		105	70 - 130
delta-BHC	1.94	1.93		ug/L		99	70 - 130
Di(2-ethylhexyl)adipate	1.94	2.05		ug/L		106	70 - 130
Dibenz(a,h)anthracene	1.94	1.94		ug/L		100	70 - 130
Diclorvos (DDVP)	1.94	1.91		ug/L		99	70 - 130
Dieldrin	1.94	1.94		ug/L		100	70 - 130
Diethylphthalate	1.94	2.06		ug/L		106	70 - 130
Dimethylphthalate	1.94	2.00		ug/L		103	70 - 130
Di-n-butyl phthalate	3.89	3.94		ug/L		101	70 - 130
Di-n-octyl phthalate	1.94	1.94		ug/L		100	70 - 130
Endosulfan I (Alpha)	1.94	1.92		ug/L		99	70 - 130
Endosulfan II (Beta)	1.94	2.03		ug/L		105	70 - 130
Endosulfan sulfate	1.94	1.94		ug/L		100	70 - 130
Endrin	1.94	1.89		ug/L		97	70 - 130
Endrin aldehyde	1.94	1.99		ug/L		102	60 - 130
EPTC	1.94	1.98		ug/L		102	70 - 130
Fluoranthene	1.94	2.22		ug/L		114	70 - 130
Fluorene	1.94	2.01		ug/L		103	70 - 130
gamma-Chlordane	1.94	2.09		ug/L		108	70 - 130
Heptachlor	1.94	1.88		ug/L		97	70 - 130
Heptachlor epoxide (isomer B)	1.94	2.26		ug/L		117	70 - 130
Hexachlorobenzene	1.94	1.93		ug/L		99	70 - 130
Hexachlorocyclopentadiene	1.94	1.55		ug/L		80	70 - 130
Indeno[1,2,3-cd]pyrene	1.94	2.00		ug/L		103	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: LCS 380-104921/23-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isophorone	1.94	1.86		ug/L		96	70 - 130
Lindane	1.94	1.86		ug/L		96	70 - 130
Malathion	1.94	2.03		ug/L		105	70 - 130
Methoxychlor	1.94	1.91		ug/L		98	70 - 130
Metolachlor	1.94	2.19		ug/L		113	70 - 130
Molinate	1.94	2.04		ug/L		105	70 - 130
Naphthalene	1.94	1.79		ug/L		92	70 - 130
Parathion	1.94	2.02		ug/L		104	70 - 130
Pendimethalin (Penoxaline)	1.94	1.96		ug/L		101	70 - 130
Phenanthrene	1.94	1.90		ug/L		98	70 - 130
Propachlor	1.94	2.06		ug/L		106	70 - 130
Pyrene	1.94	1.98		ug/L		102	70 - 130
Simazine	1.94	1.99		ug/L		103	70 - 130
Terbacil	1.94	1.94		ug/L		100	70 - 130
Terbutylazine	1.94	1.96		ug/L		101	70 - 130
Thiobencarb	1.94	2.19		ug/L		113	70 - 130
trans-Nonachlor	1.94	2.09		ug/L		107	70 - 130
Trifluralin	1.94	1.94		ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	101		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: MRL 380-104921/22-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0981	0.108		ug/L		110	50 - 150
2,4'-DDD	0.0981	0.0994		ug/L		101	50 - 150
2,4'-DDE	0.0981	0.112		ug/L		114	50 - 150
2,4'-DDT	0.0981	0.121		ug/L		123	50 - 150
2,4-Dinitrotoluene	0.0981	0.130		ug/L		132	50 - 150
2,6-Dinitrotoluene	0.0981	0.122		ug/L		124	50 - 150
2-Methylnaphthalene	0.0981	0.0996		ug/L		102	50 - 150
4,4'-DDD	0.0981	0.128		ug/L		130	50 - 150
4,4'-DDE	0.0981	0.115		ug/L		117	50 - 150
4,4'-DDT	0.0981	0.120		ug/L		122	50 - 150
Acenaphthene	0.0981	0.103		ug/L		105	50 - 150
Acenaphthylene	0.0981	0.0983		ug/L		100	50 - 150
Acetochlor	0.0981	0.135		ug/L		137	50 - 150
Alachlor	0.0491	0.0570		ug/L		116	50 - 150
alpha-BHC	0.0981	0.114		ug/L		116	50 - 150
alpha-Chlordane	0.0245	0.0353	J	ug/L		144	50 - 150
Anthracene	0.0196	0.0222		ug/L		113	50 - 150
Atrazine	0.0491	0.0711		ug/L		145	50 - 150
Benz(a)anthracene	0.0491	0.0614		ug/L		125	50 - 150

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: MRL 380-104921/22-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	0.0196	0.0241		ug/L		123	50 - 150
Benzo[b]fluoranthene	0.0196	0.0181	J	ug/L		92	50 - 150
Benzo[g,h,i]perylene	0.0491	0.0508		ug/L		104	50 - 150
Benzo[k]fluoranthene	0.0196	0.0199	J	ug/L		102	50 - 150
beta-BHC	0.0981	0.125		ug/L		127	50 - 150
Bis(2-ethylhexyl) phthalate	0.589	0.565	J	ug/L		96	50 - 150
Bromacil	0.0981	0.125		ug/L		127	50 - 150
Butachlor	0.0491	0.0782	^3+	ug/L		159	50 - 150
Butylbenzylphthalate	0.491	0.546		ug/L		111	50 - 150
Chlorobenzilate	0.0981	0.102		ug/L		104	50 - 150
Chloroneb	0.0981	0.118		ug/L		120	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0981	0.115		ug/L		117	50 - 150
Chlorpyrifos	0.0491	0.0765	^3+	ug/L		156	50 - 150
Chrysene	0.0196	0.0234		ug/L		119	50 - 150
delta-BHC	0.0981	0.114		ug/L		116	50 - 150
Di(2-ethylhexyl)adipate	0.589	0.634		ug/L		108	50 - 150
Dibenz(a,h)anthracene	0.0491	0.0524		ug/L		107	50 - 150
Diclorvos (DDVP)	0.0491	0.0544		ug/L		111	50 - 150
Dieldrin	0.00981	0.0132		ug/L		135	50 - 150
Diethylphthalate	0.491	0.572		ug/L		117	50 - 150
Dimethylphthalate	0.491	0.557		ug/L		114	50 - 150
Di-n-butyl phthalate	0.491	0.586	J	ug/L		119	49 - 243
Di-n-octyl phthalate	0.0981	0.107		ug/L		109	50 - 150
Endosulfan I (Alpha)	0.0981	0.111		ug/L		113	50 - 150
Endosulfan II (Beta)	0.0981	0.121		ug/L		123	50 - 150
Endosulfan sulfate	0.0981	0.118		ug/L		121	50 - 150
Endrin	0.00981	0.0142		ug/L		145	50 - 150
Endrin aldehyde	0.0981	0.136		ug/L		139	50 - 150
EPTC	0.0981	0.0991		ug/L		101	50 - 150
Fluoranthene	0.0981	0.117		ug/L		119	50 - 150
Fluorene	0.0491	0.0538		ug/L		110	50 - 150
gamma-Chlordane	0.0245	0.0326	J	ug/L		133	50 - 150
Heptachlor	0.00981	0.0122		ug/L		124	50 - 150
Heptachlor epoxide (isomer B)	0.00981	0.0141		ug/L		144	50 - 150
Hexachlorobenzene	0.0491	0.0502		ug/L		102	50 - 150
Hexachlorocyclopentadiene	0.0491	<0.037		ug/L		64	50 - 150
Indeno[1,2,3-cd]pyrene	0.0491	0.0457	J	ug/L		93	50 - 150
Isophorone	0.0981	0.118		ug/L		120	50 - 150
Lindane	0.00981	0.0153	^3+	ug/L		156	50 - 150
Malathion	0.0981	0.121		ug/L		124	50 - 150
Methoxychlor	0.0491	0.0735		ug/L		150	50 - 150
Metolachlor	0.0491	0.0651		ug/L		133	50 - 150
Molinate	0.0981	0.114		ug/L		116	50 - 150
Naphthalene	0.0981	0.100		ug/L		102	50 - 150
Parathion	0.0981	0.114		ug/L		116	50 - 150
Pendimethalin (Penoxaline)	0.0981	0.116		ug/L		118	50 - 150
Phenanthrene	0.0393	0.0471		ug/L		120	50 - 150
Propachlor	0.0491	0.0569		ug/L		116	50 - 150
Pyrene	0.0491	0.0677		ug/L		138	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: MRL 380-104921/22-A
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Simazine	0.0491	0.0699		ug/L		142	50 - 150
Terbacil	0.0981	0.124		ug/L		127	50 - 150
Terbutylazine	0.0981	0.122		ug/L		124	50 - 150
Thiobencarb	0.0981	0.123		ug/L		125	50 - 150
trans-Nonachlor	0.0245	0.0336	J	ug/L		137	50 - 150
Trifluralin	0.0981	0.117		ug/L		119	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: 380-109074-AF-1-A MS
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.95	1.95		ug/L		100	70 - 130
2,4'-DDD	<0.097		1.95	2.17		ug/L		111	70 - 130
2,4'-DDE	<0.097		1.95	2.08		ug/L		107	70 - 130
2,4'-DDT	<0.097		1.95	1.91		ug/L		98	70 - 130
2,4-Dinitrotoluene	<0.097		1.95	2.03		ug/L		104	70 - 130
2,6-Dinitrotoluene	<0.097		1.95	1.99		ug/L		102	70 - 130
2-Methylnaphthalene	<0.097		1.95	1.95		ug/L		100	70 - 130
4,4'-DDD	<0.097		1.95	2.01		ug/L		103	70 - 130
4,4'-DDE	<0.097		1.95	2.22		ug/L		114	70 - 130
4,4'-DDT	<0.097		1.95	1.88		ug/L		97	70 - 130
Acenaphthene	<0.097		1.95	1.92		ug/L		98	70 - 130
Acenaphthylene	<0.097		1.95	2.05		ug/L		105	70 - 130
Acetochlor	<0.097		1.95	2.20		ug/L		113	70 - 130
Alachlor	<0.049		1.95	2.25		ug/L		116	70 - 130
alpha-BHC	<0.097		1.95	2.04		ug/L		105	70 - 130
alpha-Chlordane	<0.049		1.95	2.16		ug/L		111	70 - 130
Anthracene	<0.019		1.95	1.85		ug/L		95	70 - 130
Atrazine	<0.049		1.95	2.07		ug/L		107	70 - 130
Benz(a)anthracene	<0.049		1.95	2.14		ug/L		110	70 - 130
Benzo[a]pyrene	<0.019		1.95	1.98		ug/L		102	70 - 130
Benzo[b]fluoranthene	<0.019		1.95	2.13		ug/L		109	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	1.88		ug/L		97	70 - 130
Benzo[k]fluoranthene	<0.019		1.95	2.11		ug/L		108	70 - 130
beta-BHC	<0.097		1.95	2.07		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.95	1.71		ug/L		88	70 - 130
Bromacil	<0.097		1.95	2.08		ug/L		107	70 - 130
Butachlor	<0.049	^3+	1.95	2.16		ug/L		111	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.15		ug/L		110	70 - 130
Chlorobenzilate	<0.097		1.95	1.73		ug/L		89	70 - 130
Chloroneb	<0.097		1.95	2.03		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.95	2.13		ug/L		109	70 - 130

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: 380-109074-AF-1-A MS
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Chlorpyrifos	<0.049	^3+	1.95	2.01		ug/L		103	70 - 130
Chrysene	<0.019		1.95	2.10		ug/L		108	70 - 130
delta-BHC	<0.097		1.95	2.01		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.95	1.90		ug/L		98	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	1.87		ug/L		96	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.10		ug/L		108	70 - 130
Dieldrin	<0.0097		1.95	2.03		ug/L		104	70 - 130
Diethylphthalate	<0.49		1.95	2.12		ug/L		109	70 - 130
Dimethylphthalate	<0.49		1.95	2.07		ug/L		107	70 - 130
Di-n-butyl phthalate	<0.97		3.89	4.12		ug/L		106	70 - 130
Di-n-octyl phthalate	<0.097		1.95	1.63		ug/L		84	70 - 130
Endosulfan I (Alpha)	<0.097		1.95	2.05		ug/L		105	70 - 130
Endosulfan II (Beta)	<0.097		1.95	2.13		ug/L		110	70 - 130
Endosulfan sulfate	<0.097		1.95	2.03		ug/L		104	70 - 130
Endrin	<0.0097		1.95	1.94		ug/L		100	70 - 130
Endrin aldehyde	<0.097		1.95	2.10		ug/L		108	60 - 130
EPTC	<0.097		1.95	2.04		ug/L		105	70 - 130
Fluoranthene	<0.097		1.95	2.28		ug/L		117	70 - 130
Fluorene	<0.049		1.95	2.07		ug/L		107	70 - 130
gamma-Chlordane	<0.049		1.95	2.15		ug/L		111	70 - 130
Heptachlor	<0.0097		1.95	1.98		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.95	2.39		ug/L		123	70 - 130
Hexachlorobenzene	<0.049		1.95	2.00		ug/L		103	70 - 130
Hexachlorocyclopentadiene	<0.049		1.95	1.65		ug/L		85	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.95	1.88		ug/L		97	70 - 130
Isophorone	<0.097		1.95	1.92		ug/L		99	70 - 130
Lindane	<0.0097	^3+	1.95	1.91		ug/L		98	70 - 130
Malathion	<0.097		1.95	2.12		ug/L		109	70 - 130
Methoxychlor	<0.049		1.95	2.01		ug/L		103	70 - 130
Metolachlor	<0.049		1.95	2.28		ug/L		117	70 - 130
Molinate	<0.097		1.95	2.09		ug/L		107	70 - 130
Naphthalene	<0.097		1.95	1.84		ug/L		95	70 - 130
Parathion	<0.097		1.95	2.14		ug/L		110	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.95	2.05		ug/L		105	70 - 130
Phenanthrene	<0.039		1.95	1.98		ug/L		102	70 - 130
Propachlor	<0.049		1.95	2.14		ug/L		110	70 - 130
Pyrene	<0.049		1.95	2.07		ug/L		106	70 - 130
Simazine	<0.049		1.95	2.03		ug/L		104	70 - 130
Terbacil	<0.097		1.95	2.13		ug/L		110	70 - 130
Terbutylazine	<0.097		1.95	2.05		ug/L		105	70 - 130
Thiobencarb	<0.097		1.95	2.29		ug/L		118	70 - 130
trans-Nonachlor	<0.049		1.95	2.15		ug/L		110	70 - 130
Trifluralin	<0.097		1.95	2.05		ug/L		106	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	100		70 - 130
Triphenylphosphate	117		70 - 130

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: 380-109626-AE-1-A DU
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
2,4'-DDD	<0.097		<0.097		ug/L		NC	20
2,4'-DDE	<0.097		<0.097		ug/L		NC	20
2,4'-DDT	<0.097		<0.097		ug/L		NC	20
2,4-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
4,4'-DDD	<0.097		<0.097		ug/L		NC	20
4,4'-DDE	<0.097		<0.097		ug/L		NC	20
4,4'-DDT	<0.097		<0.097		ug/L		NC	20
Acenaphthene	<0.097		<0.097		ug/L		NC	20
Acenaphthylene	<0.097		<0.097		ug/L		NC	20
Acetochlor	<0.097		<0.097		ug/L		NC	20
Alachlor	<0.048		<0.049		ug/L		NC	20
alpha-BHC	<0.097		<0.097		ug/L		NC	20
alpha-Chlordane	<0.048		<0.049		ug/L		NC	20
Anthracene	<0.019		<0.019		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		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.048		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.097		<0.097		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.58		ug/L		NC	20
Bromacil	<0.097		<0.097		ug/L		NC	20
Butachlor	<0.048	^3+	<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.48		<0.49		ug/L		NC	20
Chlorobenzilate	<0.097		<0.097		ug/L		NC	20
Chloroneb	<0.097		<0.097		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.097		ug/L		NC	20
Chlorpyrifos	<0.048	^3+	<0.049		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.097		<0.097		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.58		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	<0.0097		<0.0097		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	<0.97		<0.97		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.097		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.097		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.097		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.097		ug/L		NC	20
Endrin	<0.0097		<0.0097		ug/L		NC	20
Endrin aldehyde	<0.097		<0.097		ug/L		NC	20
EPTC	<0.097		<0.097		ug/L		NC	20

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: 380-109626-AE-1-A DU
Matrix: Water
Analysis Batch: 105252

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 104921

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Fluoranthene	<0.097		<0.097		ug/L		NC	20
Fluorene	<0.048		<0.049		ug/L		NC	20
gamma-Chlordane	<0.048		<0.049		ug/L		NC	20
Heptachlor	<0.0097		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0097		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	<0.097		<0.097		ug/L		NC	20
Lindane	<0.0097	^3+	<0.0097		ug/L		NC	20
Malathion	<0.097		<0.097		ug/L		NC	20
Methoxychlor	<0.048		<0.049		ug/L		NC	20
Metolachlor	<0.048		<0.049		ug/L		NC	20
Molinate	<0.097		<0.097		ug/L		NC	20
Naphthalene	<0.097		<0.097		ug/L		NC	20
Parathion	<0.097		<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097		<0.097		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	<0.097		<0.097		ug/L		NC	20
Terbutylazine	<0.097		<0.097		ug/L		NC	20
Thiobencarb	<0.097		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.048		<0.049		ug/L		NC	20
Trifluralin	<0.097		<0.097		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	113		70 - 130

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

Lab Sample ID: MB 570-474932/11
Matrix: Water
Analysis Batch: 474932

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			08/27/24 18:00	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	90		38 - 134		08/27/24 18:00	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: LCS 570-474932/1008
Matrix: Water
Analysis Batch: 474932

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	417		ug/L		104	78 - 120
Surrogate		LCS %Recovery	LCS Qualifier				Limits
4-Bromofluorobenzene (Surr)		88					38 - 134

Lab Sample ID: LCSD 570-474932/9
Matrix: Water
Analysis Batch: 474932

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	404		ug/L		101	78 - 120	3	10
Surrogate		LCSD %Recovery	LCSD Qualifier				Limits		
4-Bromofluorobenzene (Surr)		93					38 - 134		

Lab Sample ID: MRL 570-474932/10
Matrix: Water
Analysis Batch: 474932

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	10.5		ug/L		105	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		90					38 - 134

Lab Sample ID: 380-109664-3 MS
Matrix: Drinking Water
Analysis Batch: 474932

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	391		ug/L		98	68 - 122
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		86							38 - 134

Lab Sample ID: 380-109664-3 MSD
Matrix: Drinking Water
Analysis Batch: 474932

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	385		ug/L		96	68 - 122	2	18

QC Sample Results

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

Job ID: 380-109664-1
SDG: Weekly

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

Lab Sample ID: 380-109664-3 MSD
Matrix: Drinking Water
Analysis Batch: 474932

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)
Prep Type: Total/NA

<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
4-Bromofluorobenzene (Surr)	92		38 - 134

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

QC Association Summary

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

Job ID: 380-109664-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 104921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109664-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	
MB 380-104921/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-104921/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-104921/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-109074-AF-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-109626-AE-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 105252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109664-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	525.2	104921
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	104921
MB 380-104921/21-A	Method Blank	Total/NA	Water	525.2	104921
LCS 380-104921/23-A	Lab Control Sample	Total/NA	Water	525.2	104921
MRL 380-104921/22-A	Lab Control Sample	Total/NA	Water	525.2	104921
380-109074-AF-1-A MS	Matrix Spike	Total/NA	Water	525.2	104921
380-109626-AE-1-A DU	Duplicate	Total/NA	Water	525.2	104921

GC VOA

Analysis Batch: 474932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-109664-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Drinking Water	8015B GRO LL	
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B GRO LL	
380-109664-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC)	Total/NA	Water	8015B GRO LL	
MB 570-474932/11	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-474932/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-474932/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-474932/10	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-109664-3 MS	HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Total/NA	Drinking Water	8015B GRO LL	
380-109664-3 MSD	HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Total/NA	Drinking Water	8015B GRO LL	

Lab Chronicle

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

Job ID: 380-109664-1
SDG: Weekly

Client Sample ID: MOANALUA WELLS (331-223-TP202)

Lab Sample ID: 380-109664-1

Date Collected: 08/19/24 09:41

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			104921	IQ42	EA POM	08/22/24 15:50
Total/NA	Analysis	525.2		1	105252	Q8LA	EA POM	08/25/24 15:37
Total/NA	Analysis	8015B GRO LL		1	474932	GC3Z	EET CAL 4	08/27/24 22:28

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)

Lab Sample ID: 380-109664-3

Date Collected: 08/19/24 10:07

Matrix: Drinking Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			104921	IQ42	EA POM	08/22/24 15:50
Total/NA	Analysis	525.2		1	105252	Q8LA	EA POM	08/25/24 15:58
Total/NA	Analysis	8015B GRO LL		1	474932	GC3Z	EET CAL 4	08/27/24 22:51

Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)

Lab Sample ID: 380-109664-4

Date Collected: 08/19/24 10:07

Matrix: Water

Date Received: 08/21/24 09:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	474932	GC3Z	EET CAL 4	08/27/24 20:08

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-109664-1
 SDG: Weekly

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	08-01-24 *
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	09-12-24

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

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-109664-1
SDG: Weekly

Laboratory: Eurofins Calscience (Continued)

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

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

Method Summary

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

Job ID: 380-109664-1
SDG: Weekly

Method	Method Description	Protocol	Laboratory
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	EA POM
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
525.2	Extraction of Semivolatile Compounds	EPA	EA POM

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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



Sample Summary

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

Job ID: 380-109664-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-109664-1	MOANALUA WELLS (331-223-TP202)	Drinking Water	08/19/24 09:41	08/21/24 09:51	HI0000331
380-109664-3	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	08/19/24 10:07	08/21/24 09:51	HI0000331
380-109664-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Water	08/19/24 10:07	08/21/24 09:51	

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

Chain of Custody Record



Environment Testing

Client Information		Sampler: Arada Rachelle	Lab PM: Rachelle	Carrier Tracking Net(s):	COC No: 380-28005-2757 1										
Client Contact: Dr Ron Fenstermacher		Phone: +1 808 748 5840	E-Mail: Rachelle.Arada@et.euofins.com	State of Origin:	Page: Page 1 of 1										
Company: City & County of Honolulu		PWSID:	Job #:												
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested:	Analysis Requested:												
City: Honolulu		TAT Requested (days):	Preservation Codes: R - NaThioSO4 RA - NaThio/HCl O - Na2SO3 OA - Na2SO3/HCl Y - Trizma I - NH4 Acetate												
State, Zip: HI, 96843		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Other:												
Phone: 808-748-5091 (Tel)		PO #: C20525101 exp 05312023	Total Number of containers												
Email: RFENSTEMACHER@hbws.org		WO #:	Special Instructions/Note:												
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill		Project #: 38001111	1) 7780 8316 6775												
Site: Hawaii		SSOW#:	151A) 2.5°-0.1° = 2.4°												
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code	Matrix (W=water, S=solid, O=swastool, BT=Tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_GRO_LL - (MOD) GRO	8015B_DRO_LL_CS HNL Ranges C10-C24/C24-C36/C8-C18	525.2_PRC (MOD) 525plus Plus TICs	537 1_DW_PRC - 537 1 Full List	533 - All Analytes		
Moanahua Wells	19-Aug-2024	0941	G			Water	X		2	3	2	2			
Moanahua Wells (Matrix Spike)						Water									
Moanahua Wells (Matrix Spike Duplicate)	19-Aug-2024	0941				Water									
TB, Moanahua Wells						Water			2						
Halawa Wells Units 1 & 2	19-Aug-2024	1007	G			Water	X		4	5	4	2			
Halawa Wells Units 1 & 2 (Matrix Spike)						Water	X		X	X					
Halawa Wells Units 1 & 2 (Matrix Spike Duplicate)						Water	X		X	X					
TB Halawa Wells Units 1 & 2	19-Aug-2024	1007				Water				2					
Possible Hazard Identification		Date		Time		Method of Shipment:		Special Instructions/QC Requirements:		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client		Archive For	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		20 AUG 2024		1400		FED Ex 4 COOLERS		FED Ex 4 COOLERS		Return To Client		Return To Client		Months	
Deliverable Requested I, II, III, IV Other (specify)		Date		Time		Received by		Received by		Received by		Received by		Cooler Temperature(s) °C and Other Remarks:	
Empty Kit Requiring by		20 AUG 2024		1400		HBWS		B. REITNER		B. REITNER		B. REITNER		751A) -0.1° CORRECTION FROZEN	
Custody Seals Intact <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No		Custody Seal No		Company		Company		Company		Company		Company	



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Arada, Rachelle	Carrier Tracking No(s): 380-147745,1
Shipping/Receiving		E-Mail: Rachelle.Arada@et.eurofins.com	State of Origin: Hawaii
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State Hawaii	Job #: 380-109664-1
Address: 2841 Dow Avenue, Suite 100, Tustin		Preservation Codes:	
City: Tustin	State, Zip: CA, 92780	Analysis Requested:	
Phone: 714-395-5494(Tel)	PO #:	80158_GRO_LL/5030C (MOD) GRO	
Email:	WO #:	825_1_SIM/625_Prep (MOD) Extended PAH List	
Project Name: RED-HILL	Project #: 38001111	Compounds (Hold)	
Site: Honolulu BWS Sites	SSOW#:	62/624_C36/C8-C18	
		80158_GRO_LL_C53/10C_LL_HML Ranges: C10	
		Perform MS/MSD (Yes or No)	
		Field Filtered Sample (Yes or No)	
		Matrix (Inorganic, Specific, Organic, Other)	
		Sample Type (C=Comp, G=grab)	
		Sample Time	
		Sample Date	
		Preservation Code	
		Special Instructions/Note:	
		Total Number of Containers	
		Other	
		Initial volume (500ml) and final volume (2ml). MRLs are needed.	
		MRLs are needed.	
		Initial volume (500ml) and final volume (2ml). MRLs are needed.	
		MRLs are needed.	
		Initial volume (500ml) and final volume (2ml). MRLs are needed.	
		MRLs are needed.	
		Initial volume (500ml) and final volume (2ml). MRLs are needed.	
		MRLs are needed.	
		Initial volume (500ml) and final volume (2ml). MRLs are needed.	
		MRLs are needed.	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/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
 Return To Client Disposal By Lab Archive For Months
 Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2
 Empty Kit: Relinquished by _____ Date: _____
 Relinquished by: *[Signature]* Date/Time: 8/24/24 1300 Company: *[Signature]*
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: _____ Custody Seal No. _____
 Cooler Temperature(s) °C and Other Remarks: 16/16 SOLZ



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-109664-1

SDG Number: Weekly

Login Number: 109664

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-109664-1

SDG Number: Weekly

Login Number: 109664

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 08/22/24 03:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

