

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly

JOB NUMBER

380-144823-1

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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Definitions/Glossary

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

Job ID: 380-144823-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
B	Analyte was found in the associated method blank.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

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: 380-144823-1

Job ID: 380-144823-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-144823-1

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 4/9/2025 10:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0°C and 3.0°C.

GC/MS Semi VOA

Method 625.1_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-556030 and analytical batch 570-557573 recovered outside control limits for the following analytes: 1-Methylnaphthalene and 2-Methylnaphthalene.

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-557375 and analytical batch 570-561527 recovered outside control limits for the following analytes: C10-C28. Laboratory control sample / laboratory control sample duplicate (LCS/LCSD) percent recovery is in control for affected analytes.

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: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.039		0.0097	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.011		0.0097	ug/L	1		525.2	Total/NA

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

Lab Sample ID: 380-144823-2

No Detections.

Client Sample ID: AIEA WELLS PUMPS 1&2 P2 (260)
(331-203-TP400)
PWSID Number: HI0000331

Lab Sample ID: 380-144823-3

No Detections.

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

Lab Sample ID: 380-144823-4

No Detections.

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1

Date Collected: 04/07/25 10:03

Matrix: Drinking Water

Date Received: 04/09/25 10:15

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		04/11/25 08:36	04/13/25 14:38	1
2,4'-DDD	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
2,4'-DDE	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
2,4'-DDT	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
2-Methylnaphthalene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
4,4'-DDD	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
4,4'-DDE	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
4,4'-DDT	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Acenaphthene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Acenaphthylene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Acetochlor	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Alachlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
alpha-BHC	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
alpha-Chlordane	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Anthracene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 14:38	1
Atrazine	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 14:38	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 14:38	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 14:38	1
beta-BHC	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/11/25 08:36	04/13/25 14:38	1
Bromacil	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Butachlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/11/25 08:36	04/13/25 14:38	1
Chlorobenzilate	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Chloroneb	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Chlorpyrifos	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Chrysene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 14:38	1
delta-BHC	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Di(2-ethylhexyl)adipate	<0.58	B ^3+ **	0.58	ug/L		04/11/25 08:36	04/13/25 14:38	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Dieldrin	0.039		0.0097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Diethylphthalate	<0.49		0.49	ug/L		04/11/25 08:36	04/13/25 14:38	1
Dimethylphthalate	<0.49		0.49	ug/L		04/11/25 08:36	04/13/25 14:38	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		04/11/25 08:36	04/13/25 14:38	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Endosulfan sulfate	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Endrin	<0.0097		0.0097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Endrin aldehyde	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
EPTC	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1

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Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1

Date Collected: 04/07/25 10:03

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Fluorene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
gamma-Chlordane	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Heptachlor	<0.0097		0.0097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Heptachlor epoxide (isomer B)	0.011		0.0097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Isophorone	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Lindane	<0.0097		0.0097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Malathion	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Methoxychlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Metolachlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Molinate	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Naphthalene	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Parathion	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Phenanthrene	<0.039		0.039	ug/L		04/11/25 08:36	04/13/25 14:38	1
Propachlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Pyrene	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Simazine	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Terbacil	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Terbutylazine	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Thiobencarb	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/11/25 08:36	04/13/25 14:38	1
trans-Nonachlor	<0.049		0.049	ug/L		04/11/25 08:36	04/13/25 14:38	1
Trifluralin	<0.097		0.097	ug/L		04/11/25 08:36	04/13/25 14:38	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/11/25 08:36	04/13/25 14:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	04/11/25 08:36	04/13/25 14:38	1
Perylene-d12	79		70 - 130	04/11/25 08:36	04/13/25 14:38	1
Triphenylphosphate	103		70 - 130	04/11/25 08:36	04/13/25 14:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19	*1	0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
2-Methylnaphthalene	<0.19	*1	0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Acenaphthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Acenaphthylene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Chrysene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1

Date Collected: 04/07/25 10:03

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Fluorene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Naphthalene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Phenanthrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1
Pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		28 - 127	04/10/25 19:01	04/17/25 02:04	1
2-Fluorobiphenyl (Surr)	85		31 - 120	04/10/25 19:01	04/17/25 02:04	1
2-Fluorophenol (Surr)	43		17 - 120	04/10/25 19:01	04/17/25 02:04	1
Nitrobenzene-d5 (Surr)	92		27 - 120	04/10/25 19:01	04/17/25 02:04	1
Phenol-d6 (Surr)	26		10 - 120	04/10/25 19:01	04/17/25 02:04	1
p-Terphenyl-d14 (Surr)	82		45 - 120	04/10/25 19:01	04/17/25 02:04	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2-Butenal, 3-methyl-	18	T J N	ug/L		2.90	107-86-8	04/10/25 19:01	04/22/25 16:21	1
Propanoic acid, 2-methyl-, 3-methylbutyl ester	12	T J N	ug/L		2.99	2050-01-3	04/10/25 19:01	04/22/25 16:21	1
2-Pentene, 2,4,4-trimethyl-	12	T J N	ug/L		3.11	107-40-4	04/10/25 19:01	04/22/25 16:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		33 - 139	04/10/25 19:01	04/22/25 16:21	1
2-Fluorobiphenyl (Surr)	109		33 - 126	04/10/25 19:01	04/22/25 16:21	1
2-Fluorophenol (Surr)	47		12 - 120	04/10/25 19:01	04/22/25 16:21	1
Nitrobenzene-d5 (Surr)	114		36 - 120	04/10/25 19:01	04/22/25 16:21	1
Phenol-d6 (Surr)	27		10 - 120	04/10/25 19:01	04/22/25 16:21	1
p-Terphenyl-d14 (Surr)	113		47 - 131	04/10/25 19:01	04/22/25 16:21	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			04/16/25 00:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		38 - 134		04/16/25 00:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/13/25 17:43	04/22/25 02:07	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/13/25 17:43	04/22/25 02:07	1
C8-C18	<25		25	ug/L		04/13/25 17:43	04/22/25 02:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	122		60 - 130	04/13/25 17:43	04/22/25 02:07	1

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-2

Date Collected: 04/07/25 10:03

Matrix: Water

Date Received: 04/09/25 10:15

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			04/15/25 18:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		38 - 134				04/15/25 18:06	1

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

Lab Sample ID: 380-144823-3

Date Collected: 04/07/25 11:18

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2,4'-DDD	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2,4'-DDE	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2,4'-DDT	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
2-Methylnaphthalene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
4,4'-DDD	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
4,4'-DDE	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
4,4'-DDT	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Acenaphthene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Acenaphthylene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Acetochlor	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Alachlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
alpha-BHC	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
alpha-Chlordane	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Anthracene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 16:19	1
Atrazine	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Benz(a)anthracene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 16:19	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 16:19	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 16:19	1
beta-BHC	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/11/25 08:36	04/13/25 16:19	1
Bromacil	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Butachlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Butylbenzylphthalate	<0.48		0.48	ug/L		04/11/25 08:36	04/13/25 16:19	1
Chlorobenzilate	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Chloroneb	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Chlorpyrifos	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Chrysene	<0.019		0.019	ug/L		04/11/25 08:36	04/13/25 16:19	1
delta-BHC	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Di(2-ethylhexyl)adipate	<0.58	B ^3+ **	0.58	ug/L		04/11/25 08:36	04/13/25 16:19	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-3

Date Collected: 04/07/25 11:18

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dieldrin	<0.0096		0.0096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Diethylphthalate	<0.48		0.48	ug/L		04/11/25 08:36	04/13/25 16:19	1
Dimethylphthalate	<0.48		0.48	ug/L		04/11/25 08:36	04/13/25 16:19	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		04/11/25 08:36	04/13/25 16:19	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Endosulfan sulfate	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Endrin	<0.0096		0.0096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Endrin aldehyde	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
EPTC	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Fluoranthene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Fluorene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
gamma-Chlordane	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Heptachlor	<0.0096		0.0096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Hexachlorobenzene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Isophorone	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Lindane	<0.0096		0.0096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Malathion	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Methoxychlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Metolachlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Molinate	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Naphthalene	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Parathion	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Phenanthrene	<0.039		0.039	ug/L		04/11/25 08:36	04/13/25 16:19	1
Propachlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Pyrene	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Simazine	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Terbacil	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Terbutylazine	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Thiobencarb	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/11/25 08:36	04/13/25 16:19	1
trans-Nonachlor	<0.048		0.048	ug/L		04/11/25 08:36	04/13/25 16:19	1
Trifluralin	<0.096		0.096	ug/L		04/11/25 08:36	04/13/25 16:19	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/11/25 08:36	04/13/25 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	04/11/25 08:36	04/13/25 16:19	1
Perylene-d12	84		70 - 130	04/11/25 08:36	04/13/25 16:19	1
Triphenylphosphate	102		70 - 130	04/11/25 08:36	04/13/25 16:19	1

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-3

Date Collected: 04/07/25 11:18

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19	*1	0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
2-Methylnaphthalene	<0.19	*1	0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Acenaphthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Acenaphthylene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Chrysene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Fluoranthene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Fluorene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Naphthalene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Phenanthrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1
Pyrene	<0.19		0.19	ug/L		04/10/25 19:01	04/17/25 02:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		28 - 127	04/10/25 19:01	04/17/25 02:26	1
2-Fluorobiphenyl (Surr)	71		31 - 120	04/10/25 19:01	04/17/25 02:26	1
2-Fluorophenol (Surr)	39		17 - 120	04/10/25 19:01	04/17/25 02:26	1
Nitrobenzene-d5 (Surr)	80		27 - 120	04/10/25 19:01	04/17/25 02:26	1
Phenol-d6 (Surr)	25		10 - 120	04/10/25 19:01	04/17/25 02:26	1
p-Terphenyl-d14 (Surr)	71		45 - 120	04/10/25 19:01	04/17/25 02:26	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2-Butenal, 3-methyl-	15	T J N	ug/L		2.90	107-86-8	04/10/25 19:01	04/22/25 16:45	1
Propanoic acid, 2-methyl-, 3-methylbutyl ester	9.6	T J N	ug/L		2.99	2050-01-3	04/10/25 19:01	04/22/25 16:45	1
2-Pentene, 2,3,4-trimethyl-	13	T J N	ug/L		3.10	565-77-5	04/10/25 19:01	04/22/25 16:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		33 - 139	04/10/25 19:01	04/22/25 16:45	1
2-Fluorobiphenyl (Surr)	85		33 - 126	04/10/25 19:01	04/22/25 16:45	1
2-Fluorophenol (Surr)	43		12 - 120	04/10/25 19:01	04/22/25 16:45	1
Nitrobenzene-d5 (Surr)	90		36 - 120	04/10/25 19:01	04/22/25 16:45	1
Phenol-d6 (Surr)	23		10 - 120	04/10/25 19:01	04/22/25 16:45	1
p-Terphenyl-d14 (Surr)	89		47 - 131	04/10/25 19:01	04/22/25 16:45	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			04/16/25 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		38 - 134		04/16/25 00:29	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-3

Date Collected: 04/07/25 11:18

Matrix: Drinking Water

Date Received: 04/09/25 10:15

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/13/25 17:43	04/22/25 02:29	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/13/25 17:43	04/22/25 02:29	1
C8-C18	<25		25	ug/L		04/13/25 17:43	04/22/25 02:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	123		60 - 130			04/13/25 17:43	04/22/25 02:29	1

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

Lab Sample ID: 380-144823-4

Date Collected: 04/07/25 11:18

Matrix: Water

Date Received: 04/09/25 10:15

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			04/15/25 22:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		38 - 134				04/15/25 22:00	1

Action Limit Summary

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

Job ID: 380-144823-1
SDG: Weekly

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-144823-1

(331-206-TP065)

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 Limit	RL	Method	Prep Type
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	B ^3+ *+	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)	0.011		ug/L	0.2	0.0097	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

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

Lab Sample ID: 380-144823-3

(331-203-TP400)

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

Surrogate Summary

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

Job ID: 380-144823-1
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)
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (	98	79	103
380-144823-1 DU	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	98	91	103
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	97	84	102
Surrogate Legend				
2NMX = 2-Nitro-m-xylene				
PRY = Perylene-d12				
TPP = Triphenylphosphate				

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-144660-P-1-A MS	Matrix Spike	99	87	101
LCS 380-146705/23-A	Lab Control Sample	98	93	106
MB 380-146705/21-A	Method Blank	98	89	105
MRL 380-146705/22-A	Lab Control Sample	99	87	107
Surrogate Legend				
2NMX = 2-Nitro-m-xylene				
PRY = Perylene-d12				
TPP = Triphenylphosphate				

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (	89	109	47	114	27	113
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	78	85	43	90	23	89
Surrogate Legend							
TBP = 2,4,6-Tribromophenol (Surr)							
FBP = 2-Fluorobiphenyl (Surr)							
2FP = 2-Fluorophenol (Surr)							
NBZ = Nitrobenzene-d5 (Surr)							
PHL6 = Phenol-d6 (Surr)							
TPHd14 = p-Terphenyl-d14 (Surr)							

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
MB 570-556030/1-A	Method Blank	101	113	60	119	33	118
Surrogate Legend							

Eurofins Eaton Analytical Pomona

Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-144823-1

Project/Site: RED-HILL

SDG: Weekly

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (	87	85	43	92	26	82
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	78	71	39	80	25	71

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-144829-A-3-A MS	Matrix Spike	95	87	49	81	32	79
380-144829-A-3-B MSD	Matrix Spike Duplicate	96	85	49	81	32	84
LCS 570-556030/2-A	Lab Control Sample	100	86	55	78	34	97
LCSD 570-556030/3-A	Lab Control Sample Dup	119	106	61	104	40	111
MB 570-556030/1-A	Method Blank	123	99	53	100	32	105

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		BFB1 (38-134)					
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (	86					
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	88					

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

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

Job ID: 380-144823-1
SDG: Weekly

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-144823-2	TB: HALAWA WELLS UNITS 1&2 (3	86
380-144823-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	87
380-144829-C-3 MS	Matrix Spike	91
380-144829-C-3 MSD	Matrix Spike Duplicate	93
LCS 570-558265/4	Lab Control Sample	90
LCSD 570 558265/5	Lab Control Sample Dup	90
MB 570-558265/6	Method Blank	87
MRL 570-558265/3	Lab Control Sample	87
Surrogate Legend		
BFB = 4-Bromofluorobenzene (Surr)		

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (;	122
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	123
Surrogate Legend		
OTCSN = n-Octacosane (Surr)		

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-144829-B-3-A MS	Matrix Spike	118
380-144829-B-3-B MSD	Matrix Spike Duplicate	123
LCS 570-557375/2-A	Lab Control Sample	127
LCSD 570-557375/3-A	Lab Control Sample Dup	87
MB 570-557375/1-A	Method Blank	99
MRL 570-557375/4-A	Lab Control Sample	80
MRL 570-557375/4-A	Lab Control Sample	58
Surrogate Legend		
OTCSN = n-Octacosane (Surr)		

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MB 380-146705/21-A
Matrix: Water
Analysis Batch: 146933

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 146705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2,4'-DDD	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2,4'-DDE	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2,4'-DDT	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
2-Methylnaphthalene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
4,4'-DDD	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
4,4'-DDE	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
4,4'-DDT	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Acenaphthene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Acenaphthylene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Acetochlor	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Alachlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
alpha-BHC	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
alpha-Chlordane	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Anthracene	<0.020		0.020	ug/L		04/11/25 08:36	04/13/25 13:57	1
Atrazine	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Benz(a)anthracene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/11/25 08:36	04/13/25 13:57	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/11/25 08:36	04/13/25 13:57	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/11/25 08:36	04/13/25 13:57	1
beta-BHC	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		04/11/25 08:36	04/13/25 13:57	1
Bromacil	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Butachlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Butylbenzylphthalate	<0.50		0.50	ug/L		04/11/25 08:36	04/13/25 13:57	1
Chlorobenzilate	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Chloroneb	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Chlorpyrifos	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Chrysene	<0.020		0.020	ug/L		04/11/25 08:36	04/13/25 13:57	1
delta-BHC	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Di(2-ethylhexyl)adipate	1.24	^3+ B	0.60	ug/L		04/11/25 08:36	04/13/25 13:57	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Dieldrin	<0.0099		0.0099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Diethylphthalate	<0.50		0.50	ug/L		04/11/25 08:36	04/13/25 13:57	1
Dimethylphthalate	<0.50		0.50	ug/L		04/11/25 08:36	04/13/25 13:57	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		04/11/25 08:36	04/13/25 13:57	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Endosulfan sulfate	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Endrin	<0.0099		0.0099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Endrin aldehyde	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
EPTC	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1

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QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MB 380-146705/21-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 146705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Fluorene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
gamma-Chlordane	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Heptachlor	<0.0099		0.0099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Hexachlorobenzene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Isophorone	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Lindane	<0.0099		0.0099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Malathion	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Methoxychlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Metolachlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Molinate	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Naphthalene	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Parathion	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Phenanthrene	<0.040		0.040	ug/L		04/11/25 08:36	04/13/25 13:57	1
Propachlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Pyrene	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Simazine	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Terbacil	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Terbutylazine	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Thiobencarb	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/11/25 08:36	04/13/25 13:57	1
trans-Nonachlor	<0.050		0.050	ug/L		04/11/25 08:36	04/13/25 13:57	1
Trifluralin	<0.099		0.099	ug/L		04/11/25 08:36	04/13/25 13:57	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
9-Octadecenamide, (Z)-	1.86	T J N	ug/L		8.06	301-02-0	04/11/25 08:36	04/13/25 13:57	1
13-Docosenamide, (Z)-	0.631	T J N	ug/L		10.65	112-84-5	04/11/25 08:36	04/13/25 13:57	1
Unknown	0.639	T J	ug/L		11.63	N/A	04/11/25 08:36	04/13/25 13:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	04/11/25 08:36	04/13/25 13:57	1
Perylene-d12	89		70 - 130	04/11/25 08:36	04/13/25 13:57	1
Triphenylphosphate	105		70 - 130	04/11/25 08:36	04/13/25 13:57	1

Lab Sample ID: LCS 380-146705/23-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.99	1.96		ug/L		99	70 - 130
2,4'-DDD	1.99	2.07		ug/L		104	70 - 130
2,4'-DDE	1.99	2.07		ug/L		104	70 - 130
2,4'-DDT	1.99	1.91		ug/L		96	70 - 130
2,4-Dinitrotoluene	1.99	1.99		ug/L		100	70 - 130

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QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: LCS 380-146705/23-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	1.99	1.90		ug/L		96	70 - 130
2-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130
4,4'-DDD	1.99	2.02		ug/L		102	70 - 130
4,4'-DDE	1.99	2.07		ug/L		104	70 - 130
4,4'-DDT	1.99	1.93		ug/L		97	70 - 130
Acenaphthene	1.99	2.00		ug/L		101	70 - 130
Acenaphthylene	1.99	2.03		ug/L		102	70 - 130
Acetochlor	1.99	2.22		ug/L		112	70 - 130
Alachlor	1.99	2.23		ug/L		112	70 - 130
alpha-BHC	1.99	2.06		ug/L		104	70 - 130
alpha-Chlordane	1.99	2.10		ug/L		105	70 - 130
Anthracene	1.99	1.94		ug/L		98	70 - 130
Atrazine	1.99	2.27		ug/L		114	70 - 130
Benz(a)anthracene	1.99	1.92		ug/L		96	70 - 130
Benzo[a]pyrene	1.99	1.96		ug/L		98	70 - 130
Benzo[b]fluoranthene	1.99	2.26		ug/L		113	70 - 130
Benzo[g,h,i]perylene	1.99	1.92		ug/L		97	70 - 130
Benzo[k]fluoranthene	1.99	1.91		ug/L		96	70 - 130
beta-BHC	1.99	2.12		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.12		ug/L		107	70 - 130
Bromacil	1.99	1.87		ug/L		94	70 - 130
Butachlor	1.99	2.26		ug/L		113	70 - 130
Butylbenzylphthalate	1.99	2.22		ug/L		112	70 - 130
Chlorobenzilate	1.99	2.15		ug/L		108	70 - 130
Chloroneb	1.99	2.08		ug/L		105	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.20		ug/L		110	70 - 130
Chlorpyrifos	1.99	2.17		ug/L		109	70 - 130
Chrysene	1.99	1.99		ug/L		100	70 - 130
delta-BHC	1.99	2.05		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.72	*+	ug/L		137	70 - 130
Dibenz(a,h)anthracene	1.99	2.05		ug/L		103	70 - 130
Diclorvos (DDVP)	1.99	2.02		ug/L		102	70 - 130
Dieldrin	1.99	2.04		ug/L		103	70 - 130
Diethylphthalate	1.99	2.26		ug/L		113	70 - 130
Dimethylphthalate	1.99	2.14		ug/L		108	70 - 130
Di-n-butyl phthalate	3.98	4.08		ug/L		103	70 - 130
Di-n-octyl phthalate	1.99	2.12		ug/L		107	70 - 130
Endosulfan I (Alpha)	1.99	2.00		ug/L		101	70 - 130
Endosulfan II (Beta)	1.99	1.99		ug/L		100	70 - 130
Endosulfan sulfate	1.99	2.04		ug/L		103	70 - 130
Endrin	1.99	2.05		ug/L		103	70 - 130
Endrin aldehyde	1.99	1.99		ug/L		100	60 - 130
EPTC	1.99	2.13		ug/L		107	70 - 130
Fluoranthene	1.99	2.12		ug/L		107	70 - 130
Fluorene	1.99	2.10		ug/L		105	70 - 130
gamma-Chlordane	1.99	2.04		ug/L		103	70 - 130
Heptachlor	1.99	2.12		ug/L		107	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.09		ug/L		105	70 - 130
Hexachlorobenzene	1.99	2.01		ug/L		101	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: LCS 380-146705/23-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	1.99	1.97		ug/L		99	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	2.03		ug/L		102	70 - 130
Isophorone	1.99	2.02		ug/L		101	70 - 130
Lindane	1.99	2.06		ug/L		104	70 - 130
Malathion	1.99	2.26		ug/L		114	70 - 130
Methoxychlor	1.99	2.11		ug/L		106	70 - 130
Metolachlor	1.99	2.25		ug/L		113	70 - 130
Molinate	1.99	2.15		ug/L		108	70 - 130
Naphthalene	1.99	1.83		ug/L		92	70 - 130
Parathion	1.99	2.22		ug/L		112	70 - 130
Pendimethalin (Penoxaline)	1.99	2.06		ug/L		104	70 - 130
Phenanthrene	1.99	1.92		ug/L		97	70 - 130
Propachlor	1.99	2.25		ug/L		113	70 - 130
Pyrene	1.99	2.14		ug/L		107	70 - 130
Simazine	1.99	2.25		ug/L		113	70 - 130
Terbacil	1.99	1.98		ug/L		100	70 - 130
Terbuthylazine	1.99	2.23		ug/L		112	70 - 130
Thiobencarb	1.99	2.24		ug/L		113	70 - 130
trans-Nonachlor	1.99	2.03		ug/L		102	70 - 130
Trifluralin	1.99	2.10		ug/L		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	106		70 - 130

Lab Sample ID: MRL 380-146705/22-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0994	0.112		ug/L		113	50 - 150
2,4'-DDD	0.0994	0.0898	J	ug/L		90	50 - 150
2,4'-DDE	0.0994	0.0984	J	ug/L		99	50 - 150
2,4'-DDT	0.0994	0.0982	J	ug/L		99	50 - 150
2,4-Dinitrotoluene	0.0994	0.0950	J	ug/L		96	50 - 150
2,6-Dinitrotoluene	0.0994	0.112		ug/L		113	50 - 150
2-Methylnaphthalene	0.0994	0.108		ug/L		108	50 - 150
4,4'-DDD	0.0994	0.113		ug/L		114	50 - 150
4,4'-DDE	0.0994	0.0951	J	ug/L		96	50 - 150
4,4'-DDT	0.0994	0.105		ug/L		106	50 - 150
Acenaphthene	0.0994	0.102		ug/L		103	50 - 150
Acenaphthylene	0.0994	0.0937	J	ug/L		94	50 - 150
Acetochlor	0.0994	0.111		ug/L		111	50 - 150
Alachlor	0.0497	0.0552		ug/L		111	50 - 150
alpha-BHC	0.0994	0.107		ug/L		108	50 - 150
alpha-Chlordane	0.0249	<0.029		ug/L		102	50 - 150
Anthracene	0.0199	0.0222		ug/L		112	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MRL 380-146705/22-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	0.0497	0.0579		ug/L		117	50 - 150
Benz(a)anthracene	0.0497	0.0570		ug/L		115	50 - 150
Benzo[a]pyrene	0.0199	0.0257		ug/L		129	50 - 150
Benzo[b]fluoranthene	0.0199	0.0216		ug/L		109	50 - 150
Benzo[g,h,i]perylene	0.0497	0.0577		ug/L		116	50 - 150
Benzo[k]fluoranthene	0.0199	0.0244		ug/L		123	50 - 150
beta-BHC	0.0994	0.122		ug/L		123	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.664		ug/L		111	50 - 150
Bromacil	0.0994	0.121		ug/L		122	50 - 150
Butachlor	0.0497	0.0652		ug/L		131	50 - 150
Butylbenzylphthalate	0.497	0.575		ug/L		116	50 - 150
Chlorobenzilate	0.0994	0.116		ug/L		116	50 - 150
Chloroneb	0.0994	0.108		ug/L		108	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0994	0.0897	J	ug/L		90	50 - 150
Chlorpyrifos	0.0497	0.0554		ug/L		112	50 - 150
Chrysene	0.0199	0.0219		ug/L		110	50 - 150
delta-BHC	0.0994	0.100		ug/L		101	50 - 150
Di(2-ethylhexyl)adipate	0.596	1.62	^3+	ug/L		272	50 - 150
Dibenz(a,h)anthracene	0.0497	0.0590		ug/L		119	50 - 150
Diclorvos (DDVP)	0.0497	0.0564		ug/L		113	50 - 150
Dieldrin	0.00994	0.0103		ug/L		104	50 - 150
Diethylphthalate	0.497	0.559		ug/L		112	50 - 150
Dimethylphthalate	0.497	0.535		ug/L		108	50 - 150
Di-n-butyl phthalate	0.497	0.526	J	ug/L		106	49 - 243
Di-n-octyl phthalate	0.0994	0.115		ug/L		115	50 - 150
Endosulfan I (Alpha)	0.0994	0.103		ug/L		104	50 - 150
Endosulfan II (Beta)	0.0994	0.110		ug/L		111	50 - 150
Endosulfan sulfate	0.0994	0.0998		ug/L		100	50 - 150
Endrin	0.00994	0.0110		ug/L		111	50 - 150
Endrin aldehyde	0.0994	0.109		ug/L		110	50 - 150
EPTC	0.0994	0.100		ug/L		101	50 - 150
Fluoranthene	0.0994	0.103		ug/L		104	50 - 150
Fluorene	0.0497	0.0542		ug/L		109	50 - 150
gamma-Chlordane	0.0249	0.0212	J	ug/L		85	50 - 150
Heptachlor	0.00994	0.0101		ug/L		102	50 - 150
Heptachlor epoxide (isomer B)	0.00994	0.0114		ug/L		115	50 - 150
Hexachlorobenzene	0.0497	0.0474	J	ug/L		95	50 - 150
Hexachlorocyclopentadiene	0.0497	0.0412	J	ug/L		83	50 - 150
Indeno[1,2,3-cd]pyrene	0.0497	0.0693		ug/L		139	50 - 150
Isophorone	0.0994	0.123		ug/L		124	50 - 150
Lindane	0.00994	0.0138		ug/L		139	50 - 150
Malathion	0.0994	0.114		ug/L		114	50 - 150
Methoxychlor	0.0497	0.0550		ug/L		111	50 - 150
Metolachlor	0.0497	0.0561		ug/L		113	50 - 150
Molinate	0.0994	0.108		ug/L		109	50 - 150
Naphthalene	0.0994	0.112		ug/L		113	50 - 150
Parathion	0.0994	0.0938	J	ug/L		94	50 - 150
Pendimethalin (Penoxaline)	0.0994	0.0872	J	ug/L		88	50 - 150
Phenanthrene	0.0398	0.0431		ug/L		108	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MRL 380-146705/22-A

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Propachlor	0.0497	0.0570		ug/L		115	50 - 150
Pyrene	0.0497	0.0541		ug/L		109	50 - 150
Simazine	0.0497	0.0499	J	ug/L		100	50 - 150
Terbacil	0.0994	0.121		ug/L		122	50 - 150
Terbuthylazine	0.0994	0.109		ug/L		109	50 - 150
Thiobencarb	0.0994	0.106		ug/L		106	50 - 150
trans-Nonachlor	0.0249	0.0260	J	ug/L		104	50 - 150
Trifluralin	0.0994	0.0937	J	ug/L		94	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	87		70 - 130
Triphenylphosphate	107		70 - 130

Lab Sample ID: 380-144660-P-1-A MS

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.93	1.93		ug/L		100	70 - 130
2,4'-DDD	<0.097		1.93	1.92		ug/L		100	70 - 130
2,4'-DDE	<0.097		1.93	1.92		ug/L		100	70 - 130
2,4'-DDT	<0.097		1.93	1.74		ug/L		90	70 - 130
2,4-Dinitrotoluene	<0.097		1.93	1.99		ug/L		103	70 - 130
2,6-Dinitrotoluene	<0.097		1.93	1.90		ug/L		98	70 - 130
2-Methylnaphthalene	<0.097		1.93	1.96		ug/L		102	70 - 130
4,4'-DDD	<0.097		1.93	1.86		ug/L		96	70 - 130
4,4'-DDE	<0.097		1.93	1.87		ug/L		97	70 - 130
4,4'-DDT	<0.097		1.93	1.70		ug/L		88	70 - 130
Acenaphthene	<0.097		1.93	1.96		ug/L		102	70 - 130
Acenaphthylene	<0.097		1.93	1.97		ug/L		102	70 - 130
Acetochlor	<0.097		1.93	2.07		ug/L		108	70 - 130
Alachlor	<0.048		1.93	2.10		ug/L		109	70 - 130
alpha-BHC	<0.097		1.93	2.01		ug/L		105	70 - 130
alpha-Chlordane	<0.048		1.93	2.00		ug/L		104	70 - 130
Anthracene	<0.019	F1	1.93	1.20	F1	ug/L		62	70 - 130
Atrazine	<0.048		1.93	2.12		ug/L		110	70 - 130
Benz(a)anthracene	<0.048		1.93	1.64		ug/L		85	70 - 130
Benzo[a]pyrene	<0.019		1.93	1.51		ug/L		78	70 - 130
Benzo[b]fluoranthene	<0.019		1.93	2.19		ug/L		114	70 - 130
Benzo[g,h,i]perylene	<0.048		1.93	1.56		ug/L		81	70 - 130
Benzo[k]fluoranthene	<0.019		1.93	1.75		ug/L		91	70 - 130
beta-BHC	<0.097		1.93	2.04		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.93	1.76		ug/L		91	70 - 130
Bromacil	<0.097		1.93	1.81		ug/L		91	70 - 130
Butachlor	<0.048		1.93	2.12		ug/L		110	70 - 130
Butylbenzylphthalate	<0.48		1.93	2.10		ug/L		109	70 - 130
Chlorobenzilate	<0.097		1.93	2.07		ug/L		107	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144660-P-1-A MS

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroneb	<0.097		1.93	2.01		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.93	2.03		ug/L		105	70 - 130
Chlorpyrifos	<0.048		1.93	2.09		ug/L		109	70 - 130
Chrysene	<0.019		1.93	1.99		ug/L		103	70 - 130
delta-BHC	<0.097		1.93	1.97		ug/L		102	70 - 130
Di(2-ethylhexyl)adipate	<0.58	B ^3+ **	1.93	1.84		ug/L		75	70 - 130
Dibenz(a,h)anthracene	<0.048		1.93	1.78		ug/L		93	70 - 130
Diclorvos (DDVP)	<0.048		1.93	1.97		ug/L		102	70 - 130
Dieldrin	<0.0097		1.93	1.90		ug/L		98	70 - 130
Diethylphthalate	<0.48		1.93	2.20		ug/L		114	70 - 130
Dimethylphthalate	<0.48		1.93	2.11		ug/L		110	70 - 130
Di-n-butyl phthalate	<0.97		3.85	4.02		ug/L		104	70 - 130
Di-n-octyl phthalate	<0.097		1.93	1.60		ug/L		83	70 - 130
Endosulfan I (Alpha)	<0.097		1.93	1.94		ug/L		101	70 - 130
Endosulfan II (Beta)	<0.097		1.93	1.87		ug/L		97	70 - 130
Endosulfan sulfate	<0.097		1.93	1.85		ug/L		96	70 - 130
Endrin	<0.0097		1.93	1.80		ug/L		94	70 - 130
Endrin aldehyde	<0.097		1.93	1.61		ug/L		84	60 - 130
EPTC	<0.097		1.93	2.06		ug/L		107	70 - 130
Fluoranthene	<0.097		1.93	2.03		ug/L		105	70 - 130
Fluorene	<0.048		1.93	2.07		ug/L		107	70 - 130
gamma-Chlordane	<0.048		1.93	1.92		ug/L		100	70 - 130
Heptachlor	<0.0097		1.93	2.05		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.93	2.00		ug/L		104	70 - 130
Hexachlorobenzene	<0.048		1.93	1.99		ug/L		103	70 - 130
Hexachlorocyclopentadiene	<0.048		1.93	1.99		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.93	1.70		ug/L		88	70 - 130
Isophorone	<0.097		1.93	1.93		ug/L		100	70 - 130
Lindane	<0.0097		1.93	2.01		ug/L		104	70 - 130
Malathion	<0.097		1.93	2.18		ug/L		113	70 - 130
Methoxychlor	<0.048		1.93	2.14		ug/L		111	70 - 130
Metolachlor	<0.048		1.93	2.17		ug/L		112	70 - 130
Molinate	<0.097		1.93	2.09		ug/L		109	70 - 130
Naphthalene	<0.097		1.93	1.78		ug/L		92	70 - 130
Parathion	<0.097		1.93	2.13		ug/L		110	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.93	2.03		ug/L		105	70 - 130
Phenanthrene	<0.039		1.93	1.85		ug/L		96	70 - 130
Propachlor	<0.048		1.93	2.22		ug/L		115	70 - 130
Pyrene	<0.048		1.93	2.05		ug/L		106	70 - 130
Simazine	<0.048		1.93	2.09		ug/L		109	70 - 130
Terbacil	<0.097		1.93	1.74		ug/L		90	70 - 130
Terbutylazine	<0.097		1.93	2.10		ug/L		109	70 - 130
Thiobencarb	<0.097		1.93	2.16		ug/L		112	70 - 130
trans-Nonachlor	<0.048		1.93	1.88		ug/L		98	70 - 130
Trifluralin	<0.097		1.93	2.07		ug/L		107	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144660-P-1-A MS

Matrix: Water

Analysis Batch: 146933

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 146705

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Perylene-d12	87		70 - 130
Triphenylphosphate	101		70 - 130

Lab Sample ID: 380-144823-1 DU

Matrix: Drinking Water

Analysis Batch: 146933

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

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Sample	Sample	DU		Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.097		<0.098		ug/L		NC	20
2,4'-DDD	<0.097		<0.098		ug/L		NC	20
2,4'-DDE	<0.097		<0.098		ug/L		NC	20
2,4'-DDT	<0.097		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.097		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.098		ug/L		NC	20
4,4'-DDD	<0.097		<0.098		ug/L		NC	20
4,4'-DDE	<0.097		<0.098		ug/L		NC	20
4,4'-DDT	<0.097		<0.098		ug/L		NC	20
Acenaphthene	<0.097		<0.098		ug/L		NC	20
Acenaphthylene	<0.097		<0.098		ug/L		NC	20
Acetochlor	<0.097		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.097		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.019		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.049		<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	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.020		ug/L		NC	20
beta-BHC	<0.097		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.59		ug/L		NC	20
Bromacil	<0.097		<0.098		ug/L		NC	20
Butachlor	<0.049		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.49		ug/L		NC	20
Chlorobenzilate	<0.097		<0.098		ug/L		NC	20
Chloroneb	<0.097		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.098		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.019		<0.020		ug/L		NC	20
delta-BHC	<0.097		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58	B ^3+ *+	<0.59	B *+	ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.049		ug/L		NC	20
Dieldrin	0.039		0.0327		ug/L		18	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20
Dimethylphthalate	<0.49		<0.49		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1 DU

Matrix: Drinking Water

Analysis Batch: 146933

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

Prep Type: Total/NA

Prep Batch: 146705

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Di-n-butyl phthalate	<0.97		<0.98		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.098		ug/L		NC	20
Endrin	<0.0097		<0.0098		ug/L		NC	20
Endrin aldehyde	<0.097		<0.098		ug/L		NC	20
EPTC	<0.097		<0.098		ug/L		NC	20
Fluoranthene	<0.097		<0.098		ug/L		NC	20
Fluorene	<0.049		<0.049		ug/L		NC	20
gamma-Chlordane	<0.049		<0.049		ug/L		NC	20
Heptachlor	<0.0097		<0.0098		ug/L		NC	20
Heptachlor epoxide (isomer B)	0.011		0.0112		ug/L		0.1	20
Hexachlorobenzene	<0.049		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.049		ug/L		NC	20
Isophorone	<0.097		<0.098		ug/L		NC	20
Lindane	<0.0097		<0.0098		ug/L		NC	20
Malathion	<0.097		<0.098		ug/L		NC	20
Methoxychlor	<0.049		<0.049		ug/L		NC	20
Metolachlor	<0.049		<0.049		ug/L		NC	20
Molinate	<0.097		<0.098		ug/L		NC	20
Naphthalene	<0.097		<0.098		ug/L		NC	20
Parathion	<0.097		<0.098		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097		<0.098		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.049		ug/L		NC	20
Pyrene	<0.049		<0.049		ug/L		NC	20
Simazine	<0.049		<0.049		ug/L		NC	20
Terbacil	<0.097		<0.098		ug/L		NC	20
Terbutylazine	<0.097		<0.098		ug/L		NC	20
Thiobencarb	<0.097		<0.098		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.049		ug/L		NC	20
Trifluralin	<0.097		<0.098		ug/L		NC	20
Surrogate	%Recovery	DU Qualifier	DU	Limits				
2-Nitro-m-xylene	98			70 - 130				
Perylene-d12	91			70 - 130				
Triphenylphosphate	103			70 - 130				

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MB 570-556030/1-A
Matrix: Water
Analysis Batch: 561188

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556030

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>MB MB Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>	<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	<i>101</i>		<i>33 - 139</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>113</i>		<i>33 - 126</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>60</i>		<i>12 - 120</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>119</i>		<i>36 - 120</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>33</i>		<i>10 - 120</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>118</i>		<i>47 - 131</i>				<i>04/10/25 05:24</i>	<i>04/22/25 15:12</i>	<i>1</i>

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

Lab Sample ID: MB 570-556030/1-A
Matrix: Water
Analysis Batch: 557573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 556030

<i>Analyte</i>	<i>Result</i>	<i>MB MB Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>2-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Acenaphthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Acenaphthylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Benzo[a]anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Benzo[a]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Benzo[b]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Benzo[g,h,i]perylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Benzo[k]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Chrysene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Dibenz(a,h)anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Fluorene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Indeno[1,2,3-cd]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Naphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Phenanthrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	<i>123</i>		<i>28 - 127</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>99</i>		<i>31 - 120</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>53</i>		<i>17 - 120</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>100</i>		<i>27 - 120</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>32</i>		<i>10 - 120</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>105</i>		<i>45 - 120</i>			<i>04/10/25 05:24</i>	<i>04/14/25 13:17</i>	<i>1</i>

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: LCS 570-556030/2-A

Matrix: Water

Analysis Batch: 557573

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 556030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	13.9		ug/L		69	47 - 120
2-Methylnaphthalene	20.0	15.8		ug/L		79	43 - 120
Acenaphthene	20.0	16.6		ug/L		83	60 - 132
Acenaphthylene	20.0	16.1		ug/L		81	54 - 126
Anthracene	20.0	18.3		ug/L		91	43 - 120
Benzo[a]anthracene	20.0	18.2		ug/L		91	42 - 133
Benzo[a]pyrene	20.0	18.8		ug/L		94	32 - 148
Benzo[b]fluoranthene	20.0	19.1		ug/L		96	42 - 140
Benzo[g,h,i]perylene	20.0	18.5		ug/L		93	1 - 195
Benzo[k]fluoranthene	20.0	18.1		ug/L		91	25 - 146
Chrysene	20.0	17.8		ug/L		89	44 - 140
Dibenz(a,h)anthracene	20.0	18.5		ug/L		92	1 - 200
Fluoranthene	20.0	20.7		ug/L		103	43 - 121
Fluorene	20.0	16.8		ug/L		84	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	19.5		ug/L		97	1 - 151
Naphthalene	20.0	14.2		ug/L		71	36 - 120
Phenanthrene	20.0	18.2		ug/L		91	65 - 120
Pyrene	20.0	18.6		ug/L		93	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	100		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	97		45 - 120

Lab Sample ID: LCSD 570-556030/3-A

Matrix: Water

Analysis Batch: 557573

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556030

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	19.8	*1	ug/L		99	47 - 120	35	20
2-Methylnaphthalene	20.0	22.2	*1	ug/L		111	43 - 120	34	20
Acenaphthene	20.0	20.7		ug/L		104	60 - 132	22	29
Acenaphthylene	20.0	19.7		ug/L		98	54 - 126	20	45
Anthracene	20.0	22.0		ug/L		110	43 - 120	19	40
Benzo[a]anthracene	20.0	21.2		ug/L		106	42 - 133	15	32
Benzo[a]pyrene	20.0	20.1		ug/L		101	32 - 148	7	43
Benzo[b]fluoranthene	20.0	21.1		ug/L		105	42 - 140	10	43
Benzo[g,h,i]perylene	20.0	22.3		ug/L		112	1 - 195	18	61
Benzo[k]fluoranthene	20.0	20.9		ug/L		105	25 - 146	14	38
Chrysene	20.0	20.5		ug/L		102	44 - 140	14	53
Dibenz(a,h)anthracene	20.0	23.4		ug/L		117	1 - 200	23	75
Fluoranthene	20.0	23.8		ug/L		119	43 - 121	14	40
Fluorene	20.0	20.7		ug/L		104	70 - 120	21	23
Indeno[1,2,3-cd]pyrene	20.0	23.9		ug/L		120	1 - 151	21	60
Naphthalene	20.0	19.7		ug/L		99	36 - 120	33	39

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: LCSD 570-556030/3-A

Matrix: Water

Analysis Batch: 557573

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 556030

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	22.1		ug/L		110	65 - 120	19	24
Pyrene	20.0	22.4		ug/L		112	70 - 120	19	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	119		28 - 127
2-Fluorobiphenyl (Surr)	106		31 - 120
2-Fluorophenol (Surr)	61		17 - 120
Nitrobenzene-d5 (Surr)	104		27 - 120
Phenol-d6 (Surr)	40		10 - 120
p-Terphenyl-d14 (Surr)	111		45 - 120

Lab Sample ID: 380-144829-A-3-A MS

Matrix: Water

Analysis Batch: 558927

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 556030

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19	*1	19.4	14.7		ug/L		76	36 - 120
2-Methylnaphthalene	<0.19	*1	19.4	16.6		ug/L		85	32 - 124
Acenaphthene	<0.19		19.4	16.7		ug/L		86	47 - 145
Acenaphthylene	<0.19		19.4	16.7		ug/L		86	33 - 145
Anthracene	<0.19		19.4	17.1		ug/L		88	27 - 133
Benzo[a]anthracene	<0.19		19.4	17.4		ug/L		90	33 - 143
Benzo[a]pyrene	<0.19		19.4	16.9		ug/L		87	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	17.8		ug/L		92	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	14.4		ug/L		74	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	16.9		ug/L		87	11 - 162
Chrysene	<0.19		19.4	16.8		ug/L		86	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	15.4		ug/L		79	1 - 227
Fluoranthene	<0.19		19.4	19.7		ug/L		101	26 - 137
Fluorene	<0.19		19.4	17.5		ug/L		90	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	16.0		ug/L		82	1 - 171
Naphthalene	<0.19		19.4	14.0		ug/L		72	21 - 133
Phenanthrene	<0.19		19.4	16.6		ug/L		86	54 - 120
Pyrene	<0.19		19.4	15.5		ug/L		80	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	95		28 - 127
2-Fluorobiphenyl (Surr)	87		31 - 120
2-Fluorophenol (Surr)	49		17 - 120
Nitrobenzene-d5 (Surr)	81		27 - 120
Phenol-d6 (Surr)	32		10 - 120
p-Terphenyl-d14 (Surr)	79		45 - 120

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144829-A-3-B MSD

Matrix: Water

Analysis Batch: 558927

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 556030

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19	*1	19.3	14.3		ug/L		74	36 - 120	3	30
2-Methylnaphthalene	<0.19	*1	19.3	16.4		ug/L		85	32 - 124	1	30
Acenaphthene	<0.19		19.3	16.5		ug/L		86	47 - 145	1	48
Acenaphthylene	<0.19		19.3	15.9		ug/L		82	33 - 145	5	74
Anthracene	<0.19		19.3	16.7		ug/L		87	27 - 133	2	66
Benzo[a]anthracene	<0.19		19.3	17.2		ug/L		89	33 - 143	1	53
Benzo[a]pyrene	<0.19		19.3	15.7		ug/L		81	17 - 163	7	72
Benzo[b]fluoranthene	<0.19		19.3	16.7		ug/L		86	24 - 159	7	71
Benzo[g,h,i]perylene	<0.19		19.3	14.7		ug/L		76	1 - 219	2	97
Benzo[k]fluoranthene	<0.19		19.3	15.8		ug/L		82	11 - 162	6	63
Chrysene	<0.19		19.3	16.7		ug/L		87	17 - 168	0	87
Dibenz(a,h)anthracene	<0.19		19.3	15.9		ug/L		82	1 - 227	3	126
Fluoranthene	<0.19		19.3	19.2		ug/L		100	26 - 137	2	66
Fluorene	<0.19		19.3	16.2		ug/L		84	59 - 121	8	38
Indeno[1,2,3-cd]pyrene	<0.19		19.3	16.4		ug/L		85	1 - 171	3	99
Naphthalene	<0.19		19.3	13.8		ug/L		71	21 - 133	2	65
Phenanthrene	<0.19		19.3	16.3		ug/L		84	54 - 120	2	39
Pyrene	<0.19		19.3	16.2		ug/L		84	52 - 120	4	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	96		28 - 127
2-Fluorobiphenyl (Surr)	85		31 - 120
2-Fluorophenol (Surr)	49		17 - 120
Nitrobenzene-d5 (Surr)	81		27 - 120
Phenol-d6 (Surr)	32		10 - 120
p-Terphenyl-d14 (Surr)	84		45 - 120

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

Lab Sample ID: MB 570-558265/6

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			04/15/25 15:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		38 - 134		04/15/25 15:49	1

Lab Sample ID: LCS 570-558265/4

Matrix: Water

Analysis Batch: 558265

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	337		ug/L		84	78 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: LCS 570-558265/4

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		38 - 134

Lab Sample ID: LCSD 570-558265/5

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (C4-C13)			400	336		ug/L		84	78 - 120	0	10

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		38 - 134

Lab Sample ID: MRL 570-558265/3

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	MRL	MRL				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (C4-C13)			10.0	10.8		ug/L		108	50 - 150		

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	87		38 - 134

Lab Sample ID: 380-144829-C-3 MS

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (C4-C13)	<10		400	299		ug/L		75	68 - 122		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		38 - 134

Lab Sample ID: 380-144829-C-3 MSD

Matrix: Water

Analysis Batch: 558265

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	<10		400	342		ug/L		85	68 - 122	13	18

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

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: MB 570-557375/1-A

Matrix: Water

Analysis Batch: 561527

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 557375

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/13/25 17:43	04/23/25 00:34	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/13/25 17:43	04/23/25 00:34	1
C8-C18	<25		25	ug/L		04/13/25 17:43	04/23/25 00:34	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	99		60 - 130			04/13/25 17:43	04/23/25 00:34	1

Lab Sample ID: LCS 570-557375/2-A

Matrix: Water

Analysis Batch: 560912

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
C10-C28	1600	1480		ug/L		92	56 - 127	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
n-Octacosane (Surr)	127		60 - 130					

Lab Sample ID: LCSD 570-557375/3-A

Matrix: Water

Analysis Batch: 561527

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1120	*1	ug/L		70	56 - 127	27	23
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane (Surr)	87		60 - 130						

Lab Sample ID: MRL 570-557375/4-A

Matrix: Water

Analysis Batch: 560912

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
C10-C28	0.0200	<0.020		mg/L		97	50 - 150	
Surrogate	MRL %Recovery	MRL Qualifier	Limits					
n-Octacosane (Surr)	80		60 - 130					

Lab Sample ID: MRL 570-557375/4-A

Matrix: Water

Analysis Batch: 561527

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
C10-C28	0.0200	<0.020		mg/L		75	50 - 150	
Surrogate	MRL %Recovery	MRL Qualifier	Limits					
n-Octacosane (Surr)	58		60 - 130					

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144829-B-3-A MS

Matrix: Water

Analysis Batch: 560912

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<25	*1	1630	1380		ug/L		85	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	MS Limits								
n-Octacosane (Surr)	118		60 - 130								

Lab Sample ID: 380-144829-B-3-B MSD

Matrix: Water

Analysis Batch: 560912

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 557375

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<25	*1	1630	1490		ug/L		91	70 - 130	8	20
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
n-Octacosane (Surr)	123		60 - 130								

QC Association Summary

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

Job ID: 380-144823-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 146705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	525.2	
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	525.2	
MB 380-146705/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-146705/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-146705/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-144660-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-144823-1 DU	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	525.2	

Analysis Batch: 146933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	525.2	146705
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	525.2	146705
MB 380-146705/21-A	Method Blank	Total/NA	Water	525.2	146705
LCS 380-146705/23-A	Lab Control Sample	Total/NA	Water	525.2	146705
MRL 380-146705/22-A	Lab Control Sample	Total/NA	Water	525.2	146705
380-144660-P-1-A MS	Matrix Spike	Total/NA	Water	525.2	146705
380-144823-1 DU	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	525.2	146705

Prep Batch: 556030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	625.1	
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	625.1	
MB 570-556030/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-556030/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-556030/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-144829-A-3-A MS	Matrix Spike	Total/NA	Water	625.1	
380-144829-A-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 557573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-556030/1-A	Method Blank	Total/NA	Water	625.1 SIM	556030
LCS 570-556030/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	556030
LCSD 570-556030/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	556030

Analysis Batch: 558927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	625.1 SIM	556030
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	625.1 SIM	556030
380-144829-A-3-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	556030
380-144829-A-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	556030

Analysis Batch: 561188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	625.1	556030
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	625.1	556030
MB 570-556030/1-A	Method Blank	Total/NA	Water	625.1	556030

QC Association Summary

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

Job ID: 380-144823-1
SDG: Weekly

GC VOA

Analysis Batch: 558265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	8015B GRO LL	
380-144823-2	TB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	Total/NA	Water	8015B GRO LL	
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	8015B GRO LL	
380-144823-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Total/NA	Water	8015B GRO LL	
MB 570-558265/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-558265/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-558265/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-558265/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-144829-C-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-144829-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 557375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	3510C	
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	3510C	
MB 570-557375/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-557375/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-557375/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-557375/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-144829-B-3-A MS	Matrix Spike	Total/NA	Water	3510C	
380-144829-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 560912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Total/NA	Drinking Water	8015B	557375
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Total/NA	Drinking Water	8015B	557375
LCS 570-557375/2-A	Lab Control Sample	Total/NA	Water	8015B	557375
MRL 570-557375/4-A	Lab Control Sample	Total/NA	Water	8015B	557375
380-144829-B-3-A MS	Matrix Spike	Total/NA	Water	8015B	557375
380-144829-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	557375

Analysis Batch: 561527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-557375/1-A	Method Blank	Total/NA	Water	8015B	557375
LCSD 570-557375/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	557375
MRL 570-557375/4-A	Lab Control Sample	Total/NA	Water	8015B	557375

Lab Chronicle

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

Job ID: 380-144823-1
SDG: Weekly

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

Lab Sample ID: 380-144823-1

Date Collected: 04/07/25 10:03

Matrix: Drinking Water

Date Received: 04/09/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			146705	OTM3	EA POM	04/11/25 08:36
Total/NA	Analysis	525.2		1	146933	Q8LA	EA POM	04/13/25 14:38
Total/NA	Prep	625.1			556030	H1SH	EET CAL 4	04/10/25 19:01
Total/NA	Analysis	625.1		1	561188	CG	EET CAL 4	04/22/25 16:21
Total/NA	Prep	625.1			556030	H1SH	EET CAL 4	04/10/25 19:01
Total/NA	Analysis	625.1 SIM		1	558927	PQS1	EET CAL 4	04/17/25 02:04
Total/NA	Analysis	8015B GRO LL		1	558265	BH4T	EET CAL 4	04/16/25 00:04
Total/NA	Prep	3510C			557375	H6FE	EET CAL 4	04/13/25 17:43
Total/NA	Analysis	8015B		1	560912	H6FE	EET CAL 4	04/22/25 02:07

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

Lab Sample ID: 380-144823-2

Date Collected: 04/07/25 10:03

Matrix: Water

Date Received: 04/09/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	558265	BH4T	EET CAL 4	04/15/25 18:06

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

Lab Sample ID: 380-144823-3

Date Collected: 04/07/25 11:18

Matrix: Drinking Water

Date Received: 04/09/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			146705	OTM3	EA POM	04/11/25 08:36
Total/NA	Analysis	525.2		1	146933	Q8LA	EA POM	04/13/25 16:19
Total/NA	Prep	625.1			556030	H1SH	EET CAL 4	04/10/25 19:01
Total/NA	Analysis	625.1		1	561188	CG	EET CAL 4	04/22/25 16:45
Total/NA	Prep	625.1			556030	H1SH	EET CAL 4	04/10/25 19:01
Total/NA	Analysis	625.1 SIM		1	558927	PQS1	EET CAL 4	04/17/25 02:26
Total/NA	Analysis	8015B GRO LL		1	558265	BH4T	EET CAL 4	04/16/25 00:29
Total/NA	Prep	3510C			557375	H6FE	EET CAL 4	04/13/25 17:43
Total/NA	Analysis	8015B		1	560912	H6FE	EET CAL 4	04/22/25 02:29

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

Lab Sample ID: 380-144823-4

Date Collected: 04/07/25 11:18

Matrix: Water

Date Received: 04/09/25 10:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	558265	BH4T	EET CAL 4	04/15/25 22:00

Eurofins Eaton Analytical Pomona

Lab Chronicle

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

Job ID: 380-144823-1
SDG: Weekly

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

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Accreditation/Certification Summary

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

Job ID: 380-144823-1
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	01-31-26
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
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
Arizona	State	AZ0830	11-16-25
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-144823-1
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
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-25

Method Summary

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

Job ID: 380-144823-1
SDG: Weekly

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

Protocol References:

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

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Sample Summary

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

Job ID: 380-144823-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-144823-1	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	04/07/25 10:03	04/09/25 10:15	HI0000331
380-144823-2	TB: HALAWA WELLS UNITS 1&2 (331-206-TP065)	Water	04/07/25 10:03	04/09/25 10:15	
380-144823-3	AIEA WELLS PUMPS 1&2 P2 (260) (331-203-TP400)	Drinking Water	04/07/25 11:18	04/09/25 10:15	HI0000331
380-144823-4	TB: AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)	Water	04/07/25 11:18	04/09/25 10:15	

Chain of Custody Record



Environment Testing

Client Information		Sampler: bailey		Lab PM: Arada, Rachelle		Carrier Tracking No(s): 380-28005-2757 1	
Client Contact: Kirk Iwamoto		Phone: +1 808 748 5840		E-Mail: Rachelle.Arada@et.eurofins.com		Page: Page 1 of 1	
Company: City & County of Honolulu		PWSID:		Analysis Requested		Job #:	
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested:		TAT Requested (days):		Preservation Codes: R - NaThioSO4 RA - NaThioHCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate	
City: Honolulu		Compliance Project: Δ Yes Δ No		PO #: C20525101 exp 05312023		Other:	
State, Zip: HI, 96843		Project #: 38001111		SSOW#: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill		Total Number of Containers	
Phone: 808-748-5840 (Tel)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Email: kiwamoto@hbws.org		Sample Date		Sample Time		Matrix (Water, Seawater, Other)	
Project Name: RED-HILL/HBWS Sites		Sample Date		Sample Time		Preservation Code:	
Site: Hawaii		Sample Date		Sample Time		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Special Instructions/Note:	
Halawa Wells Units 1 & 2 P1		7-Apr-2025		1003		Water	
Halawa Wells Units 1 & 2 (Matrix Spike)						Water	
Halawa Wells Units 1 & 2 (Matrix Spike Duplicate)						Water	
TB: Halawa Wells Units 1 & 2		7-Apr-2025		1003		Water	
Aiea Wells Pumps 1&2 (260) P2		7-Apr-2025		1118		Water	
Aiea Wells Pumps 1&2 (260) (Matrix Spike)						Water	
Aiea Wells Pumps 1&2 (Matrix Spike Duplicate)						Water	
TB: Aiea Wells Pumps 1&2 (260)		7-Apr-2025		1118		Water	
Possible Hazard Identification		Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐		Deliverable Requested 1, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by		Date: 08/01/2025		Time: 1400		Return To Client ☐ Disposal By Lab ☐ Archive For Months	
Relinquished by		Date: 08/01/2025		Time: 1400		Special Instructions/QC Requirements: FED EX 8804 0028 1043	
Relinquished by		Date: 08/01/2025		Time: 1400		Method of Shipment: 28804 0028 1054	
Custody Seals intact: Δ Yes Δ No		Date: 08/01/2025		Time: 1400		Date/Time: 04/09/25 10:15	
Custody Seal No.:		Date: 08/01/2025		Time: 1400		Date/Time: 04/09/25 10:15	
Color Temperature: 23.0°-0.0°:2.0°		Date: 08/01/2025		Time: 1400		Date/Time: 04/09/25 10:15	

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

Chain of Custody Record



Loc: 380
Env **144823**

[illegible]

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		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished By: <i>Xm</i>	Date: <i>4/10/25</i>	Time: <i>11:15</i>	Relinquished By: <i>EEA</i>
Relinquished by:	Date/Time: <i>4/10/25 11:15</i>	Company: <i>UL5</i>	Received by: <i>EEA</i>
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: <i>1.1/2.1 IR92</i>	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-144823-1

SDG Number: Weekly

Login Number: 144823

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Gerfen, Chris

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-144823-1

SDG Number: Weekly

Login Number: 144823

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 04/10/25 02:21 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	2.1
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	