

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly
RUSH Weekly Red Hill

JOB NUMBER

380-143834-1

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: 380-143834-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased

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: 380-143834-1

Job ID: 380-143834-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-143834-1

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 4/4/2025 10:36 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 4.5°C and 4.8°C.

GC/MS Semi VOA

Method 625.1_SIM: The following analyte(s) recovered outside control limits for the LCSD associated with preparation batch 570-553677 and analytical batch 570-556409: Fluoranthene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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 method reporting limit check (MRL) for preparation batch 570-554296 and analytical batch 570-557672 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

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: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

No Detections.

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-143834-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

Date Collected: 04/01/25 10:00

Matrix: Drinking Water

Date Received: 04/04/25 10:36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2,4'-DDD	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2,4'-DDE	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2,4'-DDT	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2,4-Dinitrotoluene	<0.099	*+ ^+	0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2,6-Dinitrotoluene	<0.099	^3+ ^+	0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
2-Methylnaphthalene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
4,4'-DDD	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
4,4'-DDE	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
4,4'-DDT	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Acenaphthene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Acenaphthylene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Acetochlor	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Alachlor	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
alpha-BHC	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
alpha-Chlordane	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Anthracene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 21:10	1
Atrazine	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Benz(a)anthracene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 21:10	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 21:10	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 21:10	1
beta-BHC	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		04/04/25 14:45	04/06/25 21:10	1
Bromacil	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Butachlor	<0.050	*+	0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Butylbenzylphthalate	<0.50		0.50	ug/L		04/04/25 14:45	04/06/25 21:10	1
Chlorobenzilate	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Chloroneb	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Chlorpyrifos	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Chrysene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 21:10	1
delta-BHC	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		04/04/25 14:45	04/06/25 21:10	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Dieldrin	<0.0099		0.0099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Diethylphthalate	<0.50		0.50	ug/L		04/04/25 14:45	04/06/25 21:10	1
Dimethylphthalate	<0.50		0.50	ug/L		04/04/25 14:45	04/06/25 21:10	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		04/04/25 14:45	04/06/25 21:10	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Endosulfan sulfate	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Endrin	<0.0099		0.0099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Endrin aldehyde	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
EPTC	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Fluoranthene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1

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Client Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

Date Collected: 04/01/25 10:00

Matrix: Drinking Water

Date Received: 04/04/25 10:36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
gamma-Chlordane	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Heptachlor	<0.0099		0.0099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Hexachlorobenzene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Isophorone	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Lindane	<0.0099		0.0099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Malathion	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Methoxychlor	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Metolachlor	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Molinate	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Naphthalene	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Parathion	<0.099	*+ ^+	0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Pendimethalin (Penoxaline)	<0.099	^+	0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Phenanthrene	<0.040		0.040	ug/L		04/04/25 14:45	04/06/25 21:10	1
Propachlor	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Pyrene	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Simazine	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Terbacil	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Terbutylazine	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Thiobencarb	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/04/25 14:45	04/06/25 21:10	1
trans-Nonachlor	<0.050		0.050	ug/L		04/04/25 14:45	04/06/25 21:10	1
Trifluralin	<0.099		0.099	ug/L		04/04/25 14:45	04/06/25 21:10	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/04/25 14:45	04/06/25 21:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	04/04/25 14:45	04/06/25 21:10	1
Perylene-d12	79		70 - 130	04/04/25 14:45	04/06/25 21:10	1
Triphenylphosphate	108		70 - 130	04/04/25 14:45	04/06/25 21:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
2-Methylnaphthalene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Acenaphthene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Acenaphthylene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Anthracene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Chrysene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Fluoranthene	<0.19	*+	0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

Date Collected: 04/01/25 10:00

Matrix: Drinking Water

Date Received: 04/04/25 10:36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Naphthalene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Phenanthrene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1
Pyrene	<0.19		0.19	ug/L		04/04/25 09:08	04/14/25 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	112		28 - 127	04/04/25 09:08	04/14/25 18:09	1
2-Fluorobiphenyl (Surr)	100		31 - 120	04/04/25 09:08	04/14/25 18:09	1
2-Fluorophenol (Surr)	49		17 - 120	04/04/25 09:08	04/14/25 18:09	1
Nitrobenzene-d5 (Surr)	100		27 - 120	04/04/25 09:08	04/14/25 18:09	1
Phenol-d6 (Surr)	29		10 - 120	04/04/25 09:08	04/14/25 18:09	1
p-Terphenyl-d14 (Surr)	108		45 - 120	04/04/25 09:08	04/14/25 18:09	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-Pentenal, (E)-	12	T J N	ug/L		2.78	1576-87-0	04/04/25 09:08	04/16/25 16:01	1
Unknown	6.5	T J	ug/L		2.87	N/A	04/04/25 09:08	04/16/25 16:01	1
Unknown	4.4	T J	ug/L		2.97	N/A	04/04/25 09:08	04/16/25 16:01	1
Cyclohexane, 1-methyl-4-(1-methylethyl)-, trans-	8.5	T J N	ug/L		3.01	1678-82-6	04/04/25 09:08	04/16/25 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	109		33 - 139	04/04/25 09:08	04/16/25 16:01	1
2-Fluorobiphenyl (Surr)	96		33 - 126	04/04/25 09:08	04/16/25 16:01	1
2-Fluorophenol (Surr)	50		12 - 120	04/04/25 09:08	04/16/25 16:01	1
Nitrobenzene-d5 (Surr)	94		36 - 120	04/04/25 09:08	04/16/25 16:01	1
Phenol-d6 (Surr)	31		10 - 120	04/04/25 09:08	04/16/25 16:01	1
p-Terphenyl-d14 (Surr)	89		47 - 131	04/04/25 09:08	04/16/25 16:01	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			04/11/25 02:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		38 - 134		04/11/25 02:47	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		04/06/25 17:06	04/14/25 20:11	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/06/25 17:06	04/14/25 20:11	1
C8-C18	<25		25	ug/L		04/06/25 17:06	04/14/25 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	87		60 - 130	04/06/25 17:06	04/14/25 20:11	1

Client Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-143834-2

Date Collected: 04/01/25 10:00

Matrix: Water

Date Received: 04/04/25 10:36

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			04/10/25 22:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134				04/10/25 22:59	1

Action Limit Summary

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.050		ug/L	2	0.050	525.2	Total/NA
Atrazine	<0.050		ug/L	3	0.050	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.60		ug/L	6	0.60	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.60		ug/L	400	0.60	525.2	Total/NA
Endrin	<0.0099		ug/L	2	0.0099	525.2	Total/NA
Heptachlor	<0.0099		ug/L	0.4	0.0099	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0099		ug/L	0.2	0.0099	525.2	Total/NA
Hexachlorobenzene	<0.050		ug/L	1	0.050	525.2	Total/NA
Hexachlorocyclopentadiene	<0.050		ug/L	50	0.050	525.2	Total/NA
Lindane	<0.0099		ug/L	0.2	0.0099	525.2	Total/NA
Methoxychlor	<0.050		ug/L	40	0.050	525.2	Total/NA
Simazine	<0.050		ug/L	4	0.050	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: 380-143834-1
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)
380-143834-1	Halawa Shaft Viewing Pool	96	79	108
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)
380-143571-J-5-A DU	Duplicate	98	87	108
380-143699-AV-1-A MS	Matrix Spike	98	89	111
LCS 380-145556/23-A	Lab Control Sample	97	90	113
LCSD 380-145556/24-A	Lab Control Sample Dup	98	87	108
MB 380-145556/21-A	Method Blank	95	80	106
MRL 380-145556/22-A	Lab Control Sample	97	77	102
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)
380-143834-1	Halawa Shaft Viewing Pool	109	96	50	94	31	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 570-553677/1-A	Method Blank	85	113	68	120	39	115
Surrogate Legend							
TBP = 2,4,6-Tribromophenol (Surr)							
FBP = 2-Fluorobiphenyl (Surr)							
2FP = 2-Fluorophenol (Surr)							

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Surrogate Summary

Client: City & County of Honolulu

Project/Site: RED-HILL

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

Job ID: 380-143834-1

SDG: Weekly

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)
380-143834-1	Halawa Shaft Viewing Pool	112	100	49	100	29	108

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)
380-143376-A-3-A MS	Matrix Spike	112	96	64	81	43	105
380-143376-A-3-B MSD	Matrix Spike Duplicate	113	101	69	84	45	107
LCS 570-553677/2-A	Lab Control Sample	103	98	70	81	48	104
LCSD 570-553677/3-A	Lab Control Sample Dup	104	104	75	89	53	109
MB 570-553677/1-A	Method Blank	108	94	65	100	43	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)					
380-143834-1	Halawa Shaft Viewing Pool	76					

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		BFB1 (38-134)					
380-143376-C-3 MS	Matrix Spike	95					
380-143376-C-3 MSD	Matrix Spike Duplicate	92					

Surrogate Summary

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

Job ID: 380-143834-1
SDG: Weekly

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1 (38-134)					
380-143834-2	TRAVEL BLANK	81					
LCS 570-556348/4	Lab Control Sample	95					
LCSD 570-556348/5	Lab Control Sample Dup	93					
MB 570-556348/6	Method Blank	80					
MRL 570-556348/3	Lab Control Sample	84					
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)					
380-143834-1	Halawa Shaft Viewing Pool	87					
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)					
380-143376-B-3-B MS	Matrix Spike	104					
380-143376-B-3-C MSD	Matrix Spike Duplicate	94					
LCS 570-554296/2-A	Lab Control Sample	103					
LCSD 570-554296/3-A	Lab Control Sample Dup	106					
MB 570-554296/1-A	Method Blank	96					
MRL 570-554296/4-A	Lab Control Sample	106					
Surrogate Legend							
OTCSN = n-Octacosane (Surr)							

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MB 380-145556/21-A
Matrix: Water
Analysis Batch: 145672

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 145556

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2,4'-DDD	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2,4'-DDE	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2,4'-DDT	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2,6-Dinitrotoluene	<0.098	^3+	0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
2-Methylnaphthalene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
4,4'-DDD	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
4,4'-DDE	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
4,4'-DDT	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Acenaphthene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Acenaphthylene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Acetochlor	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Alachlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
alpha-BHC	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
alpha-Chlordane	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Anthracene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 14:27	1
Atrazine	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Benz(a)anthracene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 14:27	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 14:27	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 14:27	1
beta-BHC	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		04/04/25 14:45	04/06/25 14:27	1
Bromacil	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Butachlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Butylbenzylphthalate	<0.49		0.49	ug/L		04/04/25 14:45	04/06/25 14:27	1
Chlorobenzilate	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Chloroneb	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Chlorpyrifos	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Chrysene	<0.020		0.020	ug/L		04/04/25 14:45	04/06/25 14:27	1
delta-BHC	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		04/04/25 14:45	04/06/25 14:27	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Dieldrin	<0.0098		0.0098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Diethylphthalate	<0.49		0.49	ug/L		04/04/25 14:45	04/06/25 14:27	1
Dimethylphthalate	<0.49		0.49	ug/L		04/04/25 14:45	04/06/25 14:27	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		04/04/25 14:45	04/06/25 14:27	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Endosulfan sulfate	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Endrin	<0.0098		0.0098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Endrin aldehyde	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
EPTC	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1

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QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MB 380-145556/21-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 145556

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Fluorene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
gamma-Chlordane	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Heptachlor	<0.0098		0.0098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Hexachlorobenzene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Isophorone	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Lindane	<0.0098		0.0098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Malathion	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Methoxychlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Metolachlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Molinate	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Naphthalene	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Parathion	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Phenanthrene	<0.039		0.039	ug/L		04/04/25 14:45	04/06/25 14:27	1
Propachlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Pyrene	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Simazine	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Terbacil	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Terbutylazine	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Thiobencarb	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/04/25 14:45	04/06/25 14:27	1
trans-Nonachlor	<0.049		0.049	ug/L		04/04/25 14:45	04/06/25 14:27	1
Trifluralin	<0.098		0.098	ug/L		04/04/25 14:45	04/06/25 14:27	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
unknown	0.930	T J	ug/L		3.25	N/A	04/04/25 14:45	04/06/25 14:27	1
Phenol, m-tert-butyl-	0.701	T J N	ug/L		3.96	585-34-2	04/04/25 14:45	04/06/25 14:27	1
9-Octadecenamamide, (Z)-	0.838	T J N	ug/L		8.07	301-02-0	04/04/25 14:45	04/06/25 14:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	04/04/25 14:45	04/06/25 14:27	1
Perylene-d12	80		70 - 130	04/04/25 14:45	04/06/25 14:27	1
Triphenylphosphate	106		70 - 130	04/04/25 14:45	04/06/25 14:27	1

Lab Sample ID: LCS 380-145556/23-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.98	1.86		ug/L		94	70 - 130
2,4'-DDD	1.98	2.16		ug/L		109	70 - 130
2,4'-DDE	1.98	2.03		ug/L		103	70 - 130
2,4'-DDT	1.98	2.20		ug/L		111	70 - 130
2,4-Dinitrotoluene	1.98	2.56		ug/L		129	70 - 130

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QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCS 380-145556/23-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	1.98	2.53		ug/L		128	70 - 130
2-Methylnaphthalene	1.98	1.89		ug/L		96	70 - 130
4,4'-DDD	1.98	2.26		ug/L		114	70 - 130
4,4'-DDE	1.98	2.12		ug/L		107	70 - 130
4,4'-DDT	1.98	2.42		ug/L		122	70 - 130
Acenaphthene	1.98	1.96		ug/L		99	70 - 130
Acenaphthylene	1.98	1.88		ug/L		95	70 - 130
Acetochlor	1.98	2.26		ug/L		114	70 - 130
Alachlor	1.98	2.31		ug/L		117	70 - 130
alpha-BHC	1.98	2.09		ug/L		106	70 - 130
alpha-Chlordane	1.98	2.24		ug/L		113	70 - 130
Anthracene	1.98	1.88		ug/L		95	70 - 130
Atrazine	1.98	2.37		ug/L		120	70 - 130
Benz(a)anthracene	1.98	1.97		ug/L		100	70 - 130
Benzo[a]pyrene	1.98	1.94		ug/L		98	70 - 130
Benzo[b]fluoranthene	1.98	1.99		ug/L		101	70 - 130
Benzo[g,h,i]perylene	1.98	1.99		ug/L		101	70 - 130
Benzo[k]fluoranthene	1.98	2.08		ug/L		105	70 - 130
beta-BHC	1.98	2.15		ug/L		109	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	1.93		ug/L		98	70 - 130
Bromacil	1.98	2.38		ug/L		120	70 - 130
Butachlor	1.98	2.62	*+	ug/L		133	70 - 130
Butylbenzylphthalate	1.98	2.22		ug/L		112	70 - 130
Chlorobenzilate	1.98	2.27		ug/L		115	70 - 130
Chloroneb	1.98	2.05		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	2.18		ug/L		110	70 - 130
Chlorpyrifos	1.98	2.32		ug/L		117	70 - 130
Chrysene	1.98	2.04		ug/L		103	70 - 130
delta-BHC	1.98	2.12		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	1.98	2.15		ug/L		109	70 - 130
Dibenz(a,h)anthracene	1.98	2.09		ug/L		106	70 - 130
Diclorvos (DDVP)	1.98	2.07		ug/L		105	70 - 130
Dieldrin	1.98	1.86		ug/L		94	70 - 130
Diethylphthalate	1.98	2.16		ug/L		109	70 - 130
Dimethylphthalate	1.98	2.06		ug/L		104	70 - 130
Di-n-butyl phthalate	3.95	4.50		ug/L		114	70 - 130
Di-n-octyl phthalate	1.98	1.96		ug/L		99	70 - 130
Endosulfan I (Alpha)	1.98	1.95		ug/L		99	70 - 130
Endosulfan II (Beta)	1.98	2.15		ug/L		109	70 - 130
Endosulfan sulfate	1.98	2.11		ug/L		107	70 - 130
Endrin	1.98	2.46		ug/L		125	70 - 130
Endrin aldehyde	1.98	2.21		ug/L		112	60 - 130
EPTC	1.98	2.03		ug/L		103	70 - 130
Fluoranthene	1.98	2.24		ug/L		113	70 - 130
Fluorene	1.98	2.03		ug/L		103	70 - 130
gamma-Chlordane	1.98	2.24		ug/L		113	70 - 130
Heptachlor	1.98	2.38		ug/L		120	70 - 130
Heptachlor epoxide (isomer B)	1.98	2.22		ug/L		112	70 - 130
Hexachlorobenzene	1.98	1.97		ug/L		100	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCS 380-145556/23-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	1.98	2.25		ug/L		114	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	1.92		ug/L		97	70 - 130
Isophorone	1.98	1.88		ug/L		95	70 - 130
Lindane	1.98	2.16		ug/L		109	70 - 130
Malathion	1.98	2.45		ug/L		124	70 - 130
Methoxychlor	1.98	2.50		ug/L		126	70 - 130
Metolachlor	1.98	2.39		ug/L		121	70 - 130
Molinate	1.98	2.07		ug/L		105	70 - 130
Naphthalene	1.98	1.89		ug/L		96	70 - 130
Parathion	1.98	2.86	*+	ug/L		145	70 - 130
Pendimethalin (Penoxaline)	1.98	2.43		ug/L		123	70 - 130
Phenanthrene	1.98	1.91		ug/L		97	70 - 130
Propachlor	1.98	2.28		ug/L		115	70 - 130
Pyrene	1.98	2.16		ug/L		109	70 - 130
Simazine	1.98	2.38		ug/L		121	70 - 130
Terbacil	1.98	2.53		ug/L		128	70 - 130
Terbutylazine	1.98	2.33		ug/L		118	70 - 130
Thiobencarb	1.98	2.23		ug/L		113	70 - 130
trans-Nonachlor	1.98	2.25		ug/L		114	70 - 130
Trifluralin	1.98	2.12		ug/L		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	113		70 - 130

Lab Sample ID: LCSD 380-145556/24-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.97	1.85		ug/L		94	70 - 130	1	20
2,4'-DDD	1.97	2.05		ug/L		104	70 - 130	5	20
2,4'-DDE	1.97	1.95		ug/L		99	70 - 130	4	20
2,4'-DDT	1.97	2.05		ug/L		104	70 - 130	7	20
2,4-Dinitrotoluene	1.97	2.57	*+	ug/L		131	70 - 130	1	20
2,6-Dinitrotoluene	1.97	2.54		ug/L		129	70 - 130	1	20
2-Methylnaphthalene	1.97	1.86		ug/L		94	70 - 130	2	20
4,4'-DDD	1.97	2.11		ug/L		108	70 - 130	7	20
4,4'-DDE	1.97	2.01		ug/L		102	70 - 130	5	20
4,4'-DDT	1.97	2.27		ug/L		115	70 - 130	7	20
Acenaphthene	1.97	1.97		ug/L		100	70 - 130	0	20
Acenaphthylene	1.97	1.85		ug/L		94	70 - 130	1	20
Acetochlor	1.97	2.17		ug/L		110	70 - 130	4	20
Alachlor	1.97	2.24		ug/L		114	70 - 130	3	20
alpha-BHC	1.97	2.06		ug/L		105	70 - 130	2	20
alpha-Chlordane	1.97	2.14		ug/L		109	70 - 130	5	20
Anthracene	1.97	1.88		ug/L		96	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-145556/24-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Atrazine	1.97	2.27		ug/L		115	70 - 130	5	20
Benz(a)anthracene	1.97	1.86		ug/L		94	70 - 130	6	20
Benzo[a]pyrene	1.97	1.90		ug/L		97	70 - 130	2	20
Benzo[b]fluoranthene	1.97	1.99		ug/L		101	70 - 130	0	20
Benzo[g,h,i]perylene	1.97	1.86		ug/L		95	70 - 130	7	20
Benzo[k]fluoranthene	1.97	2.05		ug/L		104	70 - 130	2	20
beta-BHC	1.97	2.10		ug/L		107	70 - 130	2	20
Bis(2-ethylhexyl) phthalate	1.97	1.97		ug/L		100	70 - 130	2	20
Bromacil	1.97	2.39		ug/L		122	70 - 130	0	20
Butachlor	1.97	2.52		ug/L		128	70 - 130	4	20
Butylbenzylphthalate	1.97	2.12		ug/L		108	70 - 130	5	20
Chlorobenzilate	1.97	2.20		ug/L		112	70 - 130	3	20
Chloroneb	1.97	2.06		ug/L		105	70 - 130	0	20
Chlorothalonil (Draconil, Bravo)	1.97	2.15		ug/L		109	70 - 130	1	20
Chlorpyrifos	1.97	2.24		ug/L		114	70 - 130	3	20
Chrysene	1.97	2.03		ug/L		103	70 - 130	0	20
delta-BHC	1.97	2.06		ug/L		105	70 - 130	3	20
Di(2-ethylhexyl)adipate	1.97	2.02		ug/L		103	70 - 130	6	20
Dibenz(a,h)anthracene	1.97	2.04		ug/L		104	70 - 130	2	20
Diclorvos (DDVP)	1.97	2.08		ug/L		106	70 - 130	1	20
Dieldrin	1.97	1.76		ug/L		90	70 - 130	6	20
Diethylphthalate	1.97	2.10		ug/L		107	70 - 130	2	20
Dimethylphthalate	1.97	2.03		ug/L		103	70 - 130	2	20
Di-n-butyl phthalate	3.93	4.26		ug/L		108	70 - 130	5	20
Di-n-octyl phthalate	1.97	1.97		ug/L		100	70 - 130	1	20
Endosulfan I (Alpha)	1.97	1.91		ug/L		97	70 - 130	2	20
Endosulfan II (Beta)	1.97	2.01		ug/L		102	70 - 130	7	20
Endosulfan sulfate	1.97	1.99		ug/L		101	70 - 130	6	20
Endrin	1.97	2.35		ug/L		119	70 - 130	5	20
Endrin aldehyde	1.97	2.03		ug/L		103	60 - 130	9	20
EPTC	1.97	2.03		ug/L		103	70 - 130	0	20
Fluoranthene	1.97	2.16		ug/L		110	70 - 130	3	20
Fluorene	1.97	2.01		ug/L		102	70 - 130	1	20
gamma-Chlordane	1.97	2.13		ug/L		108	70 - 130	5	20
Heptachlor	1.97	2.33		ug/L		119	70 - 130	2	20
Heptachlor epoxide (isomer B)	1.97	2.13		ug/L		108	70 - 130	4	20
Hexachlorobenzene	1.97	1.93		ug/L		98	70 - 130	2	20
Hexachlorocyclopentadiene	1.97	2.23		ug/L		114	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	1.97	1.84		ug/L		93	70 - 130	4	20
Isophorone	1.97	1.84		ug/L		93	70 - 130	3	20
Lindane	1.97	2.09		ug/L		106	70 - 130	3	20
Malathion	1.97	2.38		ug/L		121	70 - 130	3	20
Methoxychlor	1.97	2.51		ug/L		128	70 - 130	0	20
Metolachlor	1.97	2.30		ug/L		117	70 - 130	4	20
Molinate	1.97	2.06		ug/L		105	70 - 130	0	20
Naphthalene	1.97	1.85		ug/L		94	70 - 130	2	20
Parathion	1.97	2.74	*+	ug/L		139	70 - 130	4	20
Pendimethalin (Penoxaline)	1.97	2.28		ug/L		116	70 - 130	6	20
Phenanthrene	1.97	1.90		ug/L		96	70 - 130	1	20

Euofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-145556/24-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Propachlor	1.97	2.25		ug/L		115	70 - 130	1	20
Pyrene	1.97	2.08		ug/L		106	70 - 130	4	20
Simazine	1.97	2.32		ug/L		118	70 - 130	3	20
Terbacil	1.97	2.53		ug/L		129	70 - 130	0	20
Terbutylazine	1.97	2.25		ug/L		114	70 - 130	4	20
Thiobencarb	1.97	2.15		ug/L		109	70 - 130	4	20
trans-Nonachlor	1.97	2.10		ug/L		107	70 - 130	7	20
Trifluralin	1.97	2.01		ug/L		102	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	87		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: MRL 380-145556/22-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0982	0.110		ug/L		112	50 - 150
2,4'-DDD	0.0982	0.0951	J	ug/L		97	50 - 150
2,4'-DDE	0.0982	0.105		ug/L		107	50 - 150
2,4'-DDT	0.0982	0.116		ug/L		118	50 - 150
2,4-Dinitrotoluene	0.0982	0.142		ug/L		144	50 - 150
2,6-Dinitrotoluene	0.0982	0.171	^3+	ug/L		174	50 - 150
2-Methylnaphthalene	0.0982	0.104		ug/L		106	50 - 150
4,4'-DDD	0.0982	0.111		ug/L		113	50 - 150
4,4'-DDE	0.0982	0.0960	J	ug/L		98	50 - 150
4,4'-DDT	0.0982	0.136		ug/L		138	50 - 150
Acenaphthene	0.0982	0.104		ug/L		106	50 - 150
Acenaphthylene	0.0982	0.0933	J	ug/L		95	50 - 150
Acetochlor	0.0982	0.121		ug/L		123	50 - 150
Alachlor	0.0491	0.0619		ug/L		126	50 - 150
alpha-BHC	0.0982	0.112		ug/L		114	50 - 150
alpha-Chlordane	0.0246	<0.028		ug/L		109	50 - 150
Anthracene	0.0196	0.0209		ug/L		107	50 - 150
Atrazine	0.0491	0.0640		ug/L		130	50 - 150
Benz(a)anthracene	0.0491	0.0529		ug/L		108	50 - 150
Benzo[a]pyrene	0.0196	0.0212		ug/L		108	50 - 150
Benzo[b]fluoranthene	0.0196	0.0208		ug/L		106	50 - 150
Benzo[g,h,i]perylene	0.0491	0.0386	J	ug/L		79	50 - 150
Benzo[k]fluoranthene	0.0196	0.0219		ug/L		112	50 - 150
beta-BHC	0.0982	0.127		ug/L		129	50 - 150
Bis(2-ethylhexyl) phthalate	0.589	0.572	J	ug/L		97	50 - 150
Bromacil	0.0982	0.140		ug/L		143	50 - 150
Butachlor	0.0491	0.0647		ug/L		132	50 - 150
Butylbenzylphthalate	0.491	0.529		ug/L		108	50 - 150
Chlorobenzilate	0.0982	0.115		ug/L		117	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MRL 380-145556/22-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloroneb	0.0982	0.113		ug/L		115	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0982	0.0979	J	ug/L		100	50 - 150
Chlorpyrifos	0.0491	0.0601		ug/L		122	50 - 150
Chrysene	0.0196	0.0237		ug/L		121	50 - 150
delta-BHC	0.0982	0.105		ug/L		107	50 - 150
Di(2-ethylhexyl)adipate	0.589	0.593		ug/L		101	50 - 150
Dibenz(a,h)anthracene	0.0491	0.0432	J	ug/L		88	50 - 150
Diclorvos (DDVP)	0.0491	0.0605		ug/L		123	50 - 150
Dieldrin	0.00982	0.0111		ug/L		113	50 - 150
Diethylphthalate	0.491	0.551		ug/L		112	50 - 150
Dimethylphthalate	0.491	0.522		ug/L		106	50 - 150
Di-n-butyl phthalate	0.491	0.583	J	ug/L		119	49 - 243
Di-n-octyl phthalate	0.0982	0.0750	J	ug/L		76	50 - 150
Endosulfan I (Alpha)	0.0982	0.109		ug/L		111	50 - 150
Endosulfan II (Beta)	0.0982	0.102		ug/L		104	50 - 150
Endosulfan sulfate	0.0982	0.0968	J	ug/L		99	50 - 150
Endrin	0.00982	0.0113		ug/L		115	50 - 150
Endrin aldehyde	0.0982	0.108		ug/L		110	50 - 150
EPTC	0.0982	0.0993		ug/L		101	50 - 150
Fluoranthene	0.0982	0.110		ug/L		112	50 - 150
Fluorene	0.0491	0.0539		ug/L		110	50 - 150
gamma-Chlordane	0.0246	0.0273	J	ug/L		111	50 - 150
Heptachlor	0.00982	0.0111		ug/L		113	50 - 150
Heptachlor epoxide (isomer B)	0.00982	0.0140		ug/L		142	50 - 150
Hexachlorobenzene	0.0491	0.0505		ug/L		103	50 - 150
Hexachlorocyclopentadiene	0.0491	0.0566		ug/L		115	50 - 150
Indeno[1,2,3-cd]pyrene	0.0491	0.0364	J	ug/L		74	50 - 150
Isophorone	0.0982	0.110		ug/L		112	50 - 150
Lindane	0.00982	0.0104		ug/L		106	50 - 150
Malathion	0.0982	0.128		ug/L		131	50 - 150
Methoxychlor	0.0491	0.0705		ug/L		143	50 - 150
Metolachlor	0.0491	0.0585		ug/L		119	50 - 150
Molinate	0.0982	0.105		ug/L		107	50 - 150
Naphthalene	0.0982	0.116		ug/L		118	50 - 150
Parathion	0.0982	0.132		ug/L		134	50 - 150
Pendimethalin (Penoxaline)	0.0982	0.121		ug/L		123	50 - 150
Phenanthrene	0.0393	0.0459		ug/L		117	50 - 150
Propachlor	0.0491	0.0606		ug/L		123	50 - 150
Pyrene	0.0491	0.0534		ug/L		109	50 - 150
Simazine	0.0491	0.0591		ug/L		120	50 - 150
Terbacil	0.0982	0.143		ug/L		145	50 - 150
Terbutylazine	0.0982	0.116		ug/L		118	50 - 150
Thiobencarb	0.0982	0.108		ug/L		109	50 - 150
trans-Nonachlor	0.0246	0.0285	J	ug/L		116	50 - 150
Trifluralin	0.0982	0.0952	J	ug/L		97	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MRL 380-145556/22-A

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 145556

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Perylene-d12	77		70 - 130
Triphenylphosphate	102		70 - 130

Lab Sample ID: 380-143699-AV-1-A MS

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.96	1.82		ug/L		92	70 - 130
2,4'-DDD	<0.098		1.96	2.07		ug/L		106	70 - 130
2,4'-DDE	<0.098		1.96	1.96		ug/L		100	70 - 130
2,4'-DDT	<0.098		1.96	2.14		ug/L		108	70 - 130
2,4-Dinitrotoluene	<0.098	*+ F1 ^+	1.96	2.60	F1	ug/L		133	70 - 130
2,6-Dinitrotoluene	<0.098	^3+ ^+	1.96	2.53		ug/L		129	70 - 130
2-Methylnaphthalene	<0.098		1.96	1.85		ug/L		94	70 - 130
4,4'-DDD	<0.098		1.96	2.15		ug/L		110	70 - 130
4,4'-DDE	<0.098		1.96	2.06		ug/L		105	70 - 130
4,4'-DDT	<0.098		1.96	2.38		ug/L		122	70 - 130
Acenaphthene	<0.098		1.96	1.92		ug/L		98	70 - 130
Acenaphthylene	<0.098		1.96	1.81		ug/L		92	70 - 130
Acetochlor	<0.098		1.96	2.22		ug/L		114	70 - 130
Alachlor	<0.049		1.96	2.27		ug/L		116	70 - 130
alpha-BHC	<0.098		1.96	2.06		ug/L		105	70 - 130
alpha-Chlordane	<0.049		1.96	2.20		ug/L		112	70 - 130
Anthracene	<0.020		1.96	1.55		ug/L		79	70 - 130
Atrazine	<0.049		1.96	2.26		ug/L		115	70 - 130
Benz(a)anthracene	<0.049		1.96	1.83		ug/L		93	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.76		ug/L		90	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	1.91		ug/L		97	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	1.92		ug/L		98	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	2.01		ug/L		103	70 - 130
beta-BHC	<0.098		1.96	2.07		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.86		ug/L		95	70 - 130
Bromacil	<0.098		1.96	2.40		ug/L		123	70 - 130
Butachlor	<0.049	*+	1.96	2.55		ug/L		130	70 - 130
Butylbenzylphthalate	<0.49		1.96	2.14		ug/L		109	70 - 130
Chlorobenzilate	<0.098		1.96	2.26		ug/L		114	70 - 130
Chloroneb	<0.098		1.96	2.01		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.96	2.15		ug/L		110	70 - 130
Chlorpyrifos	<0.049		1.96	2.28		ug/L		116	70 - 130
Chrysene	<0.020		1.96	1.97		ug/L		100	70 - 130
delta-BHC	<0.098		1.96	2.06		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	2.08		ug/L		106	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	2.09		ug/L		107	70 - 130
Diclorvos (DDVP)	<0.049		1.96	2.10		ug/L		108	70 - 130
Dieldrin	<0.0098		1.96	1.80		ug/L		92	70 - 130
Diethylphthalate	<0.49		1.96	2.10		ug/L		107	70 - 130
Dimethylphthalate	<0.49		1.96	2.02		ug/L		103	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: 380-143699-AV-1-A MS

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	<0.98		3.91	4.28		ug/L		109	70 - 130
Di-n-octyl phthalate	<0.098		1.96	1.88		ug/L		96	70 - 130
Endosulfan I (Alpha)	<0.098		1.96	1.94		ug/L		99	70 - 130
Endosulfan II (Beta)	<0.098		1.96	2.13		ug/L		109	70 - 130
Endosulfan sulfate	<0.098		1.96	2.06		ug/L		105	70 - 130
Endrin	<0.0098		1.96	2.39		ug/L		122	70 - 130
Endrin aldehyde	<0.098		1.96	1.96		ug/L		100	60 - 130
EPTC	<0.098		1.96	2.05		ug/L		105	70 - 130
Fluoranthene	<0.098		1.96	2.14		ug/L		109	70 - 130
Fluorene	<0.049		1.96	1.99		ug/L		102	70 - 130
gamma-Chlordane	<0.049		1.96	2.19		ug/L		112	70 - 130
Heptachlor	<0.0098		1.96	2.41		ug/L		123	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		1.96	2.20		ug/L		112	70 - 130
Hexachlorobenzene	<0.049		1.96	1.92		ug/L		98	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.22		ug/L		113	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.90		ug/L		97	70 - 130
Isophorone	<0.098		1.96	1.88		ug/L		96	70 - 130
Lindane	<0.0098		1.96	2.09		ug/L		107	70 - 130
Malathion	<0.098		1.96	2.41		ug/L		121	70 - 130
Methoxychlor	<0.049		1.96	2.47		ug/L		126	70 - 130
Metolachlor	<0.049		1.96	2.36		ug/L		121	70 - 130
Molinate	<0.098		1.96	2.04		ug/L		104	70 - 130
Naphthalene	<0.098		1.96	1.84		ug/L		94	70 - 130
Parathion	<0.098	*+ F1 ^+	1.96	2.88	F1	ug/L		147	70 - 130
Pendimethalin (Penoxaline)	<0.098	^+	1.96	2.48		ug/L		127	70 - 130
Phenanthrene	<0.039		1.96	1.86		ug/L		95	70 - 130
Propachlor	<0.049		1.96	2.27		ug/L		116	70 - 130
Pyrene	<0.049		1.96	2.06		ug/L		105	70 - 130
Simazine	<0.049		1.96	2.31		ug/L		118	70 - 130
Terbacil	<0.098		1.96	2.49		ug/L		127	70 - 130
Terbutylazine	<0.098		1.96	2.25		ug/L		115	70 - 130
Thiobencarb	<0.098		1.96	2.17		ug/L		111	70 - 130
trans-Nonachlor	<0.049		1.96	2.20		ug/L		112	70 - 130
Trifluralin	<0.098		1.96	2.15		ug/L		110	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	89		70 - 130
Triphenylphosphate	111		70 - 130

Lab Sample ID: 380-143571-J-5-A DU

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 145556

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: 380-143571-J-5-A DU

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
2,4'-DDT	<0.098		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.098	*+ ^+	<0.098	*+	ug/L		NC	20
2,6-Dinitrotoluene	<0.098	^3+ ^+	<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
4,4'-DDD	<0.098		<0.098		ug/L		NC	20
4,4'-DDE	<0.098		<0.098		ug/L		NC	20
4,4'-DDT	<0.098		<0.098		ug/L		NC	20
Acenaphthene	<0.098		<0.098		ug/L		NC	20
Acenaphthylene	<0.098		<0.098		ug/L		NC	20
Acetochlor	<0.098		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.020		<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	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.098		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.59		ug/L		NC	20
Bromacil	<0.098		<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	<0.098		<0.098		ug/L		NC	20
Chloroneb	<0.098		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.098		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.098		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.59		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	<0.0098		<0.0098		ug/L		NC	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20
Dimethylphthalate	<0.49		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.98		<0.98		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.098		ug/L		NC	20
Endrin	<0.0098		<0.0098		ug/L		NC	20
Endrin aldehyde	<0.098		<0.098		ug/L		NC	20
EPTC	<0.098		<0.098		ug/L		NC	20
Fluoranthene	<0.098		<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	<0.0098		<0.0098		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: 380-143571-J-5-A DU

Matrix: Water

Analysis Batch: 145672

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 145556

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Heptachlor epoxide (isomer B)	<0.0098		<0.0098		ug/L		NC	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	<0.098		<0.098		ug/L		NC	20
Lindane	<0.0098		<0.0098		ug/L		NC	20
Malathion	<0.098		<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	<0.098		<0.098		ug/L		NC	20
Naphthalene	<0.098		<0.098		ug/L		NC	20
Parathion	<0.098	*+ ^+	<0.098	*+	ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098	^+	<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	<0.098		<0.098		ug/L		NC	20
Terbuthylazine	<0.098		<0.098		ug/L		NC	20
Thiobencarb	<0.098		<0.098		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.049		ug/L		NC	20
Trifluralin	<0.098		<0.098		ug/L		NC	20

Surrogate	%Recovery	Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	87		70 - 130
Triphenylphosphate	108		70 - 130

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

Lab Sample ID: MB 570-553677/1-A

Matrix: Water

Analysis Batch: 558159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 553677

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/04/25 09:08	04/15/25 11:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	85		33 - 139	04/04/25 09:08	04/15/25 11:33	1
2-Fluorobiphenyl (Surr)	113		33 - 126	04/04/25 09:08	04/15/25 11:33	1
2-Fluorophenol (Surr)	68		12 - 120	04/04/25 09:08	04/15/25 11:33	1
Nitrobenzene-d5 (Surr)	120		36 - 120	04/04/25 09:08	04/15/25 11:33	1
Phenol-d6 (Surr)	39		10 - 120	04/04/25 09:08	04/15/25 11:33	1
p-Terphenyl-d14 (Surr)	115		47 - 131	04/04/25 09:08	04/15/25 11:33	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MB 570-553677/1-A

Matrix: Water

Analysis Batch: 556409

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 553677

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
2-Methylnaphthalene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Acenaphthene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Acenaphthylene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Anthracene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Benzo[a]anthracene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Benzo[a]pyrene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Chrysene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Fluoranthene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Fluorene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Naphthalene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Phenanthrene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1
Pyrene	<0.20		0.20	ug/L		04/04/25 09:08	04/10/25 16:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	108		28 - 127	04/04/25 09:08	04/10/25 16:13	1
2-Fluorobiphenyl (Surr)	94		31 - 120	04/04/25 09:08	04/10/25 16:13	1
2-Fluorophenol (Surr)	65		17 - 120	04/04/25 09:08	04/10/25 16:13	1
Nitrobenzene-d5 (Surr)	100		27 - 120	04/04/25 09:08	04/10/25 16:13	1
Phenol-d6 (Surr)	43		10 - 120	04/04/25 09:08	04/10/25 16:13	1
p-Terphenyl-d14 (Surr)	105		45 - 120	04/04/25 09:08	04/10/25 16:13	1

Lab Sample ID: LCS 570-553677/2-A

Matrix: Water

Analysis Batch: 556409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	16.4		ug/L		82	47 - 120
2-Methylnaphthalene	20.0	18.5		ug/L		93	43 - 120
Acenaphthene	20.0	19.2		ug/L		96	60 - 132
Acenaphthylene	20.0	18.6		ug/L		93	54 - 126
Anthracene	20.0	20.7		ug/L		104	43 - 120
Benzo[a]anthracene	20.0	20.0		ug/L		100	42 - 133
Benzo[a]pyrene	20.0	20.6		ug/L		103	32 - 148
Benzo[b]fluoranthene	20.0	21.4		ug/L		107	42 - 140
Benzo[g,h,i]perylene	20.0	21.7		ug/L		108	1 - 195
Benzo[k]fluoranthene	20.0	20.4		ug/L		102	25 - 146
Chrysene	20.0	19.3		ug/L		97	44 - 140
Dibenz(a,h)anthracene	20.0	21.8		ug/L		109	1 - 200
Fluoranthene	20.0	22.5		ug/L		113	43 - 121
Fluorene	20.0	20.1		ug/L		100	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	22.3		ug/L		112	1 - 151
Naphthalene	20.0	15.6		ug/L		78	36 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCS 570-553677/2-A

Matrix: Water

Analysis Batch: 556409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	20.4		ug/L		102	65 - 120
Pyrene	20.0	19.7		ug/L		98	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	103		28 - 127
2-Fluorobiphenyl (Surr)	98		31 - 120
2-Fluorophenol (Surr)	70		17 - 120
Nitrobenzene-d5 (Surr)	81		27 - 120
Phenol-d6 (Surr)	48		10 - 120
p-Terphenyl-d14 (Surr)	104		45 - 120

Lab Sample ID: LCSD 570-553677/3-A

Matrix: Water

Analysis Batch: 556409

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	17.0		ug/L		85	47 - 120	4	20
2-Methylnaphthalene	20.0	19.7		ug/L		99	43 - 120	6	20
Acenaphthene	20.0	20.5		ug/L		102	60 - 132	6	29
Acenaphthylene	20.0	19.7		ug/L		99	54 - 126	6	45
Anthracene	20.0	22.3		ug/L		112	43 - 120	7	40
Benzo[a]anthracene	20.0	21.4		ug/L		107	42 - 133	7	32
Benzo[a]pyrene	20.0	21.9		ug/L		109	32 - 148	6	43
Benzo[b]fluoranthene	20.0	22.9		ug/L		114	42 - 140	7	43
Benzo[g,h,i]perylene	20.0	22.4		ug/L		112	1 - 195	3	61
Benzo[k]fluoranthene	20.0	21.6		ug/L		108	25 - 146	6	38
Chrysene	20.0	20.7		ug/L		103	44 - 140	7	53
Dibenz(a,h)anthracene	20.0	23.8		ug/L		119	1 - 200	9	75
Fluoranthene	20.0	24.4	*+	ug/L		122	43 - 121	8	40
Fluorene	20.0	21.5		ug/L		108	70 - 120	7	23
Indeno[1,2,3-cd]pyrene	20.0	23.9		ug/L		119	1 - 151	7	60
Naphthalene	20.0	16.9		ug/L		85	36 - 120	8	39
Phenanthrene	20.0	22.2		ug/L		111	65 - 120	8	24
Pyrene	20.0	20.1		ug/L		101	70 - 120	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	104		28 - 127
2-Fluorobiphenyl (Surr)	104		31 - 120
2-Fluorophenol (Surr)	75		17 - 120
Nitrobenzene-d5 (Surr)	89		27 - 120
Phenol-d6 (Surr)	53		10 - 120
p-Terphenyl-d14 (Surr)	109		45 - 120

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: 380-143376-A-3-A MS

Matrix: Water

Analysis Batch: 557358

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.2	15.1		ug/L		79	36 - 120
2-Methylnaphthalene	<0.19		19.2	16.8		ug/L		87	32 - 124
Acenaphthene	<0.19		19.2	18.7		ug/L		98	47 - 145
Acenaphthylene	<0.19		19.2	17.5		ug/L		91	33 - 145
Anthracene	<0.19		19.2	20.9		ug/L		109	27 - 133
Benzo[a]anthracene	<0.19		19.2	20.3		ug/L		106	33 - 143
Benzo[a]pyrene	<0.19		19.2	20.9		ug/L		109	17 - 163
Benzo[b]fluoranthene	<0.19		19.2	21.1		ug/L		110	24 - 159
Benzo[g,h,i]perylene	<0.19		19.2	19.4		ug/L		101	1 - 219
Benzo[k]fluoranthene	<0.19		19.2	20.4		ug/L		106	11 - 162
Chrysene	<0.19		19.2	20.1		ug/L		105	17 - 168
Dibenz(a,h)anthracene	<0.19		19.2	19.1		ug/L		99	1 - 227
Fluoranthene	<0.19	*+	19.2	22.8		ug/L		119	26 - 137
Fluorene	<0.19		19.2	18.7		ug/L		97	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.2	20.1		ug/L		105	1 - 171
Naphthalene	<0.19		19.2	14.8		ug/L		77	21 - 133
Phenanthrene	<0.19		19.2	20.4		ug/L		106	54 - 120
Pyrene	<0.19		19.2	21.1		ug/L		110	52 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	112		28 - 127
2-Fluorobiphenyl (Surr)	96		31 - 120
2-Fluorophenol (Surr)	64		17 - 120
Nitrobenzene-d5 (Surr)	81		27 - 120
Phenol-d6 (Surr)	43		10 - 120
p-Terphenyl-d14 (Surr)	105		45 - 120

Lab Sample ID: 380-143376-A-3-B MSD

Matrix: Water

Analysis Batch: 557358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19		19.1	15.5		ug/L		81	36 - 120	2	30
2-Methylnaphthalene	<0.19		19.1	17.3		ug/L		91	32 - 124	3	30
Acenaphthene	<0.19		19.1	19.2		ug/L		100	47 - 145	2	48
Acenaphthylene	<0.19		19.1	18.0		ug/L		94	33 - 145	3	74
Anthracene	<0.19		19.1	21.0		ug/L		110	27 - 133	1	66
Benzo[a]anthracene	<0.19		19.1	20.4		ug/L		107	33 - 143	1	53
Benzo[a]pyrene	<0.19		19.1	21.0		ug/L		110	17 - 163	1	72
Benzo[b]fluoranthene	<0.19		19.1	20.7		ug/L		108	24 - 159	2	71
Benzo[g,h,i]perylene	<0.19		19.1	19.7		ug/L		103	1 - 219	1	97
Benzo[k]fluoranthene	<0.19		19.1	20.9		ug/L		109	11 - 162	2	63
Chrysene	<0.19		19.1	20.3		ug/L		106	17 - 168	1	87
Dibenz(a,h)anthracene	<0.19		19.1	19.3		ug/L		101	1 - 227	1	126
Fluoranthene	<0.19	*+	19.1	22.7		ug/L		119	26 - 137	0	66
Fluorene	<0.19		19.1	19.1		ug/L		100	59 - 121	2	38
Indeno[1,2,3-cd]pyrene	<0.19		19.1	20.6		ug/L		108	1 - 171	3	99
Naphthalene	<0.19		19.1	15.5		ug/L		81	21 - 133	5	65

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: 380-143376-A-3-B MSD

Matrix: Water

Analysis Batch: 557358

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 553677

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.1	20.6		ug/L		108	54 - 120	1	39
Pyrene	<0.19		19.1	21.7		ug/L		113	52 - 120	3	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	113		28 - 127
2-Fluorobiphenyl (Surr)	101		31 - 120
2-Fluorophenol (Surr)	69		17 - 120
Nitrobenzene-d5 (Surr)	84		27 - 120
Phenol-d6 (Surr)	45		10 - 120
p-Terphenyl-d14 (Surr)	107		45 - 120

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

Lab Sample ID: MB 570-556348/6

Matrix: Water

Analysis Batch: 556348

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			04/10/25 17:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		38 - 134		04/10/25 17:18	1

Lab Sample ID: LCS 570-556348/4

Matrix: Water

Analysis Batch: 556348

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	385		ug/L		96	78 - 120

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

Lab Sample ID: LCSD 570-556348/5

Matrix: Water

Analysis Batch: 556348

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	384		ug/L		96	78 - 120	0	10

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

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: MRL 570-556348/3

Matrix: Water

Analysis Batch: 556348

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	12.1		ug/L		121	50 - 150		
Surrogate	MRL	MRL									
	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	84		38 - 134								

Lab Sample ID: 380-143376-C-3 MS

Matrix: Water

Analysis Batch: 556348

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	391		ug/L		98	68 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	95		38 - 134						

Lab Sample ID: 380-143376-C-3 MSD

Matrix: Water

Analysis Batch: 556348

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	374		ug/L		94	68 - 122	4	18
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	92		38 - 134								

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

Lab Sample ID: MB 570-554296/1-A

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 554296

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/06/25 17:06	04/14/25 15:26	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/06/25 17:06	04/14/25 15:26	1
C8-C18	<25		25	ug/L		04/06/25 17:06	04/14/25 15:26	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	96		60 - 130			04/06/25 17:06	04/14/25 15:26	1

Lab Sample ID: LCS 570-554296/2-A

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 554296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1350		ug/L		84	56 - 127

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-143834-1
SDG: Weekly

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

Lab Sample ID: LCS 570-554296/2-A

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 554296

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	103		60 - 130

Lab Sample ID: LCSD 570-554296/3-A

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 554296

	Spike	LCSD	LCSD						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
C10-C28	1600	1340		ug/L		84	56 - 127	0	23	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	106		60 - 130

Lab Sample ID: MRL 570-554296/4-A

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 554296

	Spike	MRL	MRL						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
C10-C28	0.0200	0.0308	^3+	mg/L		154	50 - 150			

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	106		60 - 130

Lab Sample ID: 380-143376-B-3-B MS

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 554296

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C10-C28	<26	^3+	1680	1400		ug/L		83	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	104		60 - 130

Lab Sample ID: 380-143376-B-3-C MSD

Matrix: Water

Analysis Batch: 557672

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 554296

	Sample	Sample	Spike	MSD	MSD				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD
C10-C28	<26	^3+	1680	1250		ug/L		74	70 - 130	11

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	94		60 - 130

QC Association Summary

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

Job ID: 380-143834-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 145556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	
MB 380-145556/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-145556/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-145556/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-145556/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-143699-AV-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-143571-J-5-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 145672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	145556
MB 380-145556/21-A	Method Blank	Total/NA	Water	525.2	145556
LCS 380-145556/23-A	Lab Control Sample	Total/NA	Water	525.2	145556
LCSD 380-145556/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	145556
MRL 380-145556/22-A	Lab Control Sample	Total/NA	Water	525.2	145556
380-143699-AV-1-A MS	Matrix Spike	Total/NA	Water	525.2	145556
380-143571-J-5-A DU	Duplicate	Total/NA	Water	525.2	145556

Prep Batch: 553677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	
MB 570-553677/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-553677/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-553677/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-143376-A-3-A MS	Matrix Spike	Total/NA	Water	625.1	
380-143376-A-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 556409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-553677/1-A	Method Blank	Total/NA	Water	625.1 SIM	553677
LCS 570-553677/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	553677
LCSD 570-553677/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	553677

Analysis Batch: 557358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143376-A-3-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	553677
380-143376-A-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	553677

Analysis Batch: 557573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1 SIM	553677

Analysis Batch: 558159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-553677/1-A	Method Blank	Total/NA	Water	625.1	553677

Analysis Batch: 558582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	553677

QC Association Summary

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

Job ID: 380-143834-1
SDG: Weekly

GC VOA

Analysis Batch: 556348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B GRO LL	
380-143834-2	TRAVEL BLANK	Total/NA	Water	8015B GRO LL	
MB 570-556348/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-556348/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-556348/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-556348/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-143376-C-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-143376-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 554296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	3510C	
MB 570-554296/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-554296/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-554296/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-554296/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-143376-B-3-B MS	Matrix Spike	Total/NA	Water	3510C	
380-143376-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 557672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-143834-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B	554296
MB 570-554296/1-A	Method Blank	Total/NA	Water	8015B	554296
LCS 570-554296/2-A	Lab Control Sample	Total/NA	Water	8015B	554296
LCSD 570-554296/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	554296
MRL 570-554296/4-A	Lab Control Sample	Total/NA	Water	8015B	554296
380-143376-B-3-B MS	Matrix Spike	Total/NA	Water	8015B	554296
380-143376-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	554296

Lab Chronicle

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

Job ID: 380-143834-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-143834-1

Date Collected: 04/01/25 10:00

Matrix: Drinking Water

Date Received: 04/04/25 10:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			145556	IQ42	EA POM	04/04/25 14:45
Total/NA	Analysis	525.2		1	145672	Q8LA	EA POM	04/06/25 21:10
Total/NA	Prep	625.1			553677	S8LD	EET CAL 4	04/04/25 09:08
Total/NA	Analysis	625.1		1	558582	PQS1	EET CAL 4	04/16/25 16:01
Total/NA	Prep	625.1			553677	S8LD	EET CAL 4	04/04/25 09:08
Total/NA	Analysis	625.1 SIM		1	557573	PQS1	EET CAL 4	04/14/25 18:09
Total/NA	Analysis	8015B GRO LL		1	556348	A9VE	EET CAL 4	04/11/25 02:47
Total/NA	Prep	3510C			554296	H6FE	EET CAL 4	04/06/25 17:06
Total/NA	Analysis	8015B		1	557672	NR	EET CAL 4	04/14/25 20:11

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-143834-2

Date Collected: 04/01/25 10:00

Matrix: Water

Date Received: 04/04/25 10:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	556348	A9VE	EET CAL 4	04/10/25 22:59

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-143834-1
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	04-10-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
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: 380-143834-1
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: 380-143834-1
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: 380-143834-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-143834-1	Halawa Shaft Viewing Pool	Drinking Water	04/01/25 10:00	04/04/25 10:36
380-143834-2	TRAVEL BLANK	Water	04/01/25 10:00	04/04/25 10:36

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Ver 04/02/2024

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

Chain of Custody Record



Environi

[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-143834-1

SDG Number: Weekly

Login Number: 143834

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Segura, Ryan

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-143834-1

SDG Number: Weekly

Login Number: 143834

List Number: 2

Creator: Ablian, Samantha

List Source: Eurofins Calscience

List Creation: 04/04/25 06:04 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.	True	
Sample custody seals, if present, are intact.	True	
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	0.6 & 1.9
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	