

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/13/2025 5:48:55 PM

JOB DESCRIPTION

RED-HILL
Weekly

JOB NUMBER

380-138045-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



Generated
3/13/2025 5:48:55 PM

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



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
QC Sample Results	14
QC Association Summary	30
Lab Chronicle	32
Certification Summary	33
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	39

Definitions/Glossary

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

Job ID: 380-138045-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: 380-138045-1

Job ID: 380-138045-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-138045-1

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 2/27/2025 10:03 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

GC/MS Semi VOA

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

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: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-541050. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method: 3510C_LL

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

Detection Summary

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-138045-2

No Detections.

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

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2,4'-DDD	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2,4'-DDE	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2,4'-DDT	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
2-Methylnaphthalene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
4,4'-DDD	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
4,4'-DDE	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
4,4'-DDT	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Acenaphthene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Acenaphthylene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Acetochlor	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Alachlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
alpha-BHC	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
alpha-Chlordane	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Anthracene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 19:12	1
Atrazine	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Benz(a)anthracene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Benzo[a]pyrene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 19:12	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 19:12	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 19:12	1
beta-BHC	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		03/03/25 06:17	03/03/25 19:12	1
Bromacil	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Butachlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Butylbenzylphthalate	<0.49		0.49	ug/L		03/03/25 06:17	03/03/25 19:12	1
Chlorobenzilate	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Chloroneb	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Chlorpyrifos	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Chrysene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 19:12	1
delta-BHC	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		03/03/25 06:17	03/03/25 19:12	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Dieldrin	<0.0098		0.0098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Diethylphthalate	<0.49		0.49	ug/L		03/03/25 06:17	03/03/25 19:12	1
Dimethylphthalate	<0.49		0.49	ug/L		03/03/25 06:17	03/03/25 19:12	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		03/03/25 06:17	03/03/25 19:12	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Endosulfan sulfate	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Endrin	<0.0098		0.0098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Endrin aldehyde	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
EPTC	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Fluoranthene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
gamma-Chlordane	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Heptachlor	<0.0098		0.0098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Hexachlorobenzene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Isophorone	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Lindane	<0.0098		0.0098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Malathion	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Methoxychlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Metolachlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Molinate	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Naphthalene	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Parathion	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Phenanthrene	<0.039		0.039	ug/L		03/03/25 06:17	03/03/25 19:12	1
Propachlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Pyrene	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Simazine	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Terbacil	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Terbutylazine	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Thiobencarb	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		03/03/25 06:17	03/03/25 19:12	1
trans-Nonachlor	<0.049		0.049	ug/L		03/03/25 06:17	03/03/25 19:12	1
Trifluralin	<0.098		0.098	ug/L		03/03/25 06:17	03/03/25 19:12	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	03/03/25 06:17	03/03/25 19:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	03/03/25 06:17	03/03/25 19:12	1
Perylene-d12	96		70 - 130	03/03/25 06:17	03/03/25 19:12	1
Triphenylphosphate	93		70 - 130	03/03/25 06:17	03/03/25 19:12	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		03/03/25 05:43	03/07/25 15:55	1
2-Methylnaphthalene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Acenaphthene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Acenaphthylene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Anthracene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Benzo[a]anthracene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Benzo[a]pyrene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Chrysene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Fluoranthene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

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		03/03/25 05:43	03/07/25 15:55	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Naphthalene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Phenanthrene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1
Pyrene	<0.19		0.19	ug/L		03/03/25 05:43	03/07/25 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	69		28 - 127	03/03/25 05:43	03/07/25 15:55	1
2-Fluorobiphenyl (Surr)	73		31 - 120	03/03/25 05:43	03/07/25 15:55	1
2-Fluorophenol (Surr)	34		17 - 120	03/03/25 05:43	03/07/25 15:55	1
Nitrobenzene-d5 (Surr)	70		27 - 120	03/03/25 05:43	03/07/25 15:55	1
Phenol-d6 (Surr)	20		10 - 120	03/03/25 05:43	03/07/25 15:55	1
p-Terphenyl-d14 (Surr)	77		45 - 120	03/03/25 05:43	03/07/25 15:55	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-	37	T J N	ug/L		2.37	107-86-8	03/03/25 05:43	03/13/25 10:56	1
Cyclohexane, (1,1-dimethylpropyl)-	15	T J N	ug/L		2.46	31797-64-5	03/03/25 05:43	03/13/25 10:56	1
Cyclohexane, 1-methyl-2-propyl-	25	T J N	ug/L		2.58	4291-79-6	03/03/25 05:43	03/13/25 10:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	111		33 - 139	03/03/25 05:43	03/13/25 10:56	1
2-Fluorobiphenyl (Surr)	85		33 - 126	03/03/25 05:43	03/13/25 10:56	1
2-Fluorophenol (Surr)	39		12 - 120	03/03/25 05:43	03/13/25 10:56	1
Nitrobenzene-d5 (Surr)	75		36 - 120	03/03/25 05:43	03/13/25 10:56	1
Phenol-d6 (Surr)	23		10 - 120	03/03/25 05:43	03/13/25 10:56	1
p-Terphenyl-d14 (Surr)	93		47 - 131	03/03/25 05:43	03/13/25 10:56	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			03/05/25 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134		03/05/25 19:20	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		03/04/25 18:17	03/11/25 06:40	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		03/04/25 18:17	03/11/25 06:40	1
C8-C18	<25		25	ug/L		03/04/25 18:17	03/11/25 06:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	93		60 - 130	03/04/25 18:17	03/11/25 06:40	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-138045-2

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

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			03/05/25 23:30	1

Euofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-138045-2

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
4-Bromofluorobenzene (Surr)	77		38 - 134		03/05/25 23:30	1

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

Action Limit Summary

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

Job ID: 380-138045-1
 SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

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	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
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: 380-138045-1
SDG: Weekly

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)
380-137941-AI-1-A MS	Matrix Spike	97	98	100
380-138045-1	HALAWA SHAFT VIEWING POOL	97	96	93
380-138045-1 DU	HALAWA SHAFT VIEWING POOL	97	94	95
LCS 380-139257/23-A	Lab Control Sample	95	98	97
LCSD 380-139257/24-A	Lab Control Sample Dup	97	99	98
MB 380-139257/21-A	Method Blank	96	100	96
MRL 380-139257/22-A	Lab Control Sample	96	98	97

Surrogate Legend

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

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)
380-138045-1	HALAWA SHAFT VIEWING POOL	111	85	39	75	23	93
MB 570-540166/1-A	Method Blank	78	67	34	61	22	83

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)
380-138045-1	HALAWA SHAFT VIEWING POOL	69	73	34	70	20	77
LCS 570-540166/2-A	Lab Control Sample	62	69	40	62	26	70
LCSD 570-540166/3-A	Lab Control Sample Dup	69	76	44	67	29	74
MB 570-540166/1-A	Method Blank	55	58	33	57	20	67

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)

Surrogate Summary

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

Job ID: 380-138045-1
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)
380-137752-C-1 MS	Matrix Spike	98
380-137752-C-1 MSD	Matrix Spike Duplicate	98
380-138045-1	HALAWA SHAFT VIEWING POOL	81
380-138045-2	TRIP BLANK	77
LCS 570-541268/4	Lab Control Sample	94
LCSD 570 541268/7	Lab Control Sample Dup	97
MB 570-541268/6	Method Blank	81
MRL 570-541268/3	Lab Control Sample	79

Surrogate Legend

BFB = 4-Bromofluorobenzene (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)
380-138045-1	HALAWA SHAFT VIEWING POOL	93
LCS 570-541050/2-A	Lab Control Sample	97
LCSD 570-541050/3-A	Lab Control Sample Dup	99
MB 570-541050/1-A	Method Blank	103
MRL 570-541050/4-A	Lab Control Sample	107

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MB 380-139257/21-A
Matrix: Water
Analysis Batch: 139310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 139257

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2,4'-DDD	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2,4'-DDE	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2,4'-DDT	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
2-Methylnaphthalene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
4,4'-DDD	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
4,4'-DDE	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
4,4'-DDT	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Acenaphthene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Acenaphthylene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Acetochlor	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Alachlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
alpha-BHC	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
alpha-Chlordane	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Anthracene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 15:45	1
Atrazine	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Benz(a)anthracene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Benzo[a]pyrene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 15:45	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 15:45	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 15:45	1
beta-BHC	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		03/03/25 06:17	03/03/25 15:45	1
Bromacil	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Butachlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Butylbenzylphthalate	<0.50		0.50	ug/L		03/03/25 06:17	03/03/25 15:45	1
Chlorobenzilate	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Chloroneb	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Chlorpyrifos	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Chrysene	<0.020		0.020	ug/L		03/03/25 06:17	03/03/25 15:45	1
delta-BHC	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		03/03/25 06:17	03/03/25 15:45	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Dieldrin	<0.0099		0.0099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Diethylphthalate	<0.50		0.50	ug/L		03/03/25 06:17	03/03/25 15:45	1
Dimethylphthalate	<0.50		0.50	ug/L		03/03/25 06:17	03/03/25 15:45	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		03/03/25 06:17	03/03/25 15:45	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Endosulfan sulfate	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Endrin	<0.0099		0.0099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Endrin aldehyde	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
EPTC	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MB 380-139257/21-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 139310

Prep Batch: 139257

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Fluorene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
gamma-Chlordane	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Heptachlor	<0.0099		0.0099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Hexachlorobenzene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Isophorone	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Lindane	<0.0099		0.0099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Malathion	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Methoxychlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Metolachlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Molinate	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Naphthalene	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Parathion	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Phenanthrene	<0.040		0.040	ug/L		03/03/25 06:17	03/03/25 15:45	1
Propachlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Pyrene	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Simazine	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Terbacil	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Terbutylazine	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Thiobencarb	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		03/03/25 06:17	03/03/25 15:45	1
trans-Nonachlor	<0.050		0.050	ug/L		03/03/25 06:17	03/03/25 15:45	1
Trifluralin	<0.099		0.099	ug/L		03/03/25 06:17	03/03/25 15:45	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Hexadecanamide	0.910	T J N	ug/L		7.02	629-54-9	03/03/25 06:17	03/03/25 15:45	1
9-Octadecenamide, (Z)-	8.48	T J N	ug/L		7.88	301-02-0	03/03/25 06:17	03/03/25 15:45	1
9-Octadecenamide, (Z)-	0.745	T J N	ug/L		7.98	301-02-0	03/03/25 06:17	03/03/25 15:45	1
13-Docosenamide, (Z)-	6.37	T J N	ug/L		10.41	112-84-5	03/03/25 06:17	03/03/25 15:45	1
Unknown	0.682	T J	ug/L		10.71	N/A	03/03/25 06:17	03/03/25 15:45	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	96		70 - 130	03/03/25 06:17	03/03/25 15:45	1
Perylene-d12	100		70 - 130	03/03/25 06:17	03/03/25 15:45	1
Triphenylphosphate	96		70 - 130	03/03/25 06:17	03/03/25 15:45	1

Lab Sample ID: LCS 380-139257/23-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 139310

Prep Batch: 139257

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	1.98	1.73		ug/L		87	70 - 130
2,4'-DDD	1.98	1.96		ug/L		99	70 - 130
2,4'-DDE	1.98	1.81		ug/L		91	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
 SDG: Weekly

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

Lab Sample ID: LCS 380-139257/23-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
2,4'-DDT	1.98	1.97		ug/L		99	70 - 130
2,4-Dinitrotoluene	1.98	1.79		ug/L		90	70 - 130
2,6-Dinitrotoluene	1.98	1.63		ug/L		82	70 - 130
2-Methylnaphthalene	1.98	1.75		ug/L		88	70 - 130
4,4'-DDD	1.98	2.03		ug/L		103	70 - 130
4,4'-DDE	1.98	1.93		ug/L		97	70 - 130
4,4'-DDT	1.98	1.89		ug/L		95	70 - 130
Acenaphthene	1.98	1.86		ug/L		94	70 - 130
Acenaphthylene	1.98	1.86		ug/L		94	70 - 130
Acetochlor	1.98	1.91		ug/L		96	70 - 130
Alachlor	1.98	1.86		ug/L		94	70 - 130
alpha-BHC	1.98	1.92		ug/L		97	70 - 130
alpha-Chlordane	1.98	1.77		ug/L		89	70 - 130
Anthracene	1.98	1.96		ug/L		99	70 - 130
Atrazine	1.98	1.91		ug/L		96	70 - 130
Benz(a)anthracene	1.98	1.87		ug/L		94	70 - 130
Benzo[a]pyrene	1.98	2.06		ug/L		104	70 - 130
Benzo[b]fluoranthene	1.98	2.02		ug/L		102	70 - 130
Benzo[g,h,i]perylene	1.98	1.93		ug/L		98	70 - 130
Benzo[k]fluoranthene	1.98	1.99		ug/L		100	70 - 130
beta-BHC	1.98	1.95		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	1.97		ug/L		99	70 - 130
Bromacil	1.98	1.78		ug/L		90	70 - 130
Butachlor	1.98	2.06		ug/L		104	70 - 130
Butylbenzylphthalate	1.98	2.01		ug/L		101	70 - 130
Chlorobenzilate	1.98	1.48		ug/L		75	70 - 130
Chloroneb	1.98	1.75		ug/L		88	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	1.91		ug/L		96	70 - 130
Chlorpyrifos	1.98	1.90		ug/L		96	70 - 130
Chrysene	1.98	1.87		ug/L		94	70 - 130
delta-BHC	1.98	1.93		ug/L		97	70 - 130
Di(2-ethylhexyl)adipate	1.98	1.98		ug/L		100	70 - 130
Dibenz(a,h)anthracene	1.98	1.84		ug/L		93	70 - 130
Diclorvos (DDVP)	1.98	1.87		ug/L		94	70 - 130
Dieldrin	1.98	1.86		ug/L		94	70 - 130
Diethylphthalate	1.98	1.90		ug/L		96	70 - 130
Dimethylphthalate	1.98	1.87		ug/L		94	70 - 130
Di-n-butyl phthalate	3.97	4.02		ug/L		101	70 - 130
Di-n-octyl phthalate	1.98	1.77		ug/L		89	70 - 130
Endosulfan I (Alpha)	1.98	1.89		ug/L		95	70 - 130
Endosulfan II (Beta)	1.98	1.97		ug/L		99	70 - 130
Endosulfan sulfate	1.98	1.97		ug/L		99	70 - 130
Endrin	1.98	2.02		ug/L		102	70 - 130
Endrin aldehyde	1.98	1.86		ug/L		94	60 - 130
EPTC	1.98	1.93		ug/L		97	70 - 130
Fluoranthene	1.98	1.94		ug/L		98	70 - 130
Fluorene	1.98	1.86		ug/L		94	70 - 130
gamma-Chlordane	1.98	1.65		ug/L		83	70 - 130
Heptachlor	1.98	2.15		ug/L		108	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: LCS 380-139257/23-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (isomer B)	1.98	1.98		ug/L		100	70 - 130
Hexachlorobenzene	1.98	1.68		ug/L		85	70 - 130
Hexachlorocyclopentadiene	1.98	1.70		ug/L		86	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	1.90		ug/L		96	70 - 130
Isophorone	1.98	1.97		ug/L		100	70 - 130
Lindane	1.98	1.93		ug/L		97	70 - 130
Malathion	1.98	1.89		ug/L		95	70 - 130
Methoxychlor	1.98	2.09		ug/L		105	70 - 130
Metolachlor	1.98	2.12		ug/L		107	70 - 130
Molinate	1.98	1.93		ug/L		98	70 - 130
Naphthalene	1.98	1.88		ug/L		95	70 - 130
Parathion	1.98	1.96		ug/L		99	70 - 130
Pendimethalin (Penoxaline)	1.98	1.86		ug/L		94	70 - 130
Phenanthrene	1.98	1.89		ug/L		95	70 - 130
Propachlor	1.98	1.99		ug/L		100	70 - 130
Pyrene	1.98	1.97		ug/L		99	70 - 130
Simazine	1.98	1.95		ug/L		98	70 - 130
Terbacil	1.98	2.05		ug/L		103	70 - 130
Terbutylazine	1.98	1.95		ug/L		98	70 - 130
Thiobencarb	1.98	2.12		ug/L		107	70 - 130
trans-Nonachlor	1.98	1.74		ug/L		88	70 - 130
Trifluralin	1.98	1.72		ug/L		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	97		70 - 130

Lab Sample ID: LCSD 380-139257/24-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.98	1.81		ug/L		92	70 - 130	5	20
2,4'-DDD	1.98	2.05		ug/L		104	70 - 130	5	20
2,4'-DDE	1.98	1.90		ug/L		96	70 - 130	5	20
2,4'-DDT	1.98	2.08		ug/L		105	70 - 130	6	20
2,4-Dinitrotoluene	1.98	2.06		ug/L		104	70 - 130	14	20
2,6-Dinitrotoluene	1.98	1.84		ug/L		93	70 - 130	12	20
2-Methylnaphthalene	1.98	1.81		ug/L		92	70 - 130	3	20
4,4'-DDD	1.98	2.11		ug/L		107	70 - 130	4	20
4,4'-DDE	1.98	2.01		ug/L		102	70 - 130	4	20
4,4'-DDT	1.98	2.00		ug/L		101	70 - 130	6	20
Acenaphthene	1.98	1.96		ug/L		99	70 - 130	5	20
Acenaphthylene	1.98	1.98		ug/L		100	70 - 130	6	20
Acetochlor	1.98	2.02		ug/L		102	70 - 130	6	20
Alachlor	1.98	1.95		ug/L		99	70 - 130	5	20
alpha-BHC	1.98	2.05		ug/L		104	70 - 130	6	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-139257/24-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
alpha-Chlordane	1.98	1.82		ug/L		92	70 - 130	3	20	
Anthracene	1.98	2.04		ug/L		103	70 - 130	4	20	
Atrazine	1.98	2.07		ug/L		105	70 - 130	8	20	
Benz(a)anthracene	1.98	1.95		ug/L		99	70 - 130	4	20	
Benzo[a]pyrene	1.98	2.15		ug/L		109	70 - 130	4	20	
Benzo[b]fluoranthene	1.98	2.16		ug/L		109	70 - 130	7	20	
Benzo[g,h,i]perylene	1.98	2.00		ug/L		101	70 - 130	3	20	
Benzo[k]fluoranthene	1.98	2.03		ug/L		103	70 - 130	2	20	
beta-BHC	1.98	2.04		ug/L		103	70 - 130	4	20	
Bis(2-ethylhexyl) phthalate	1.98	2.18		ug/L		110	70 - 130	10	20	
Bromacil	1.98	2.00		ug/L		101	70 - 130	12	20	
Butachlor	1.98	2.16		ug/L		109	70 - 130	5	20	
Butylbenzylphthalate	1.98	2.10		ug/L		106	70 - 130	4	20	
Chlorobenzilate	1.98	1.46		ug/L		74	70 - 130	1	20	
Chloroneb	1.98	1.86		ug/L		94	70 - 130	6	20	
Chlorothalonil (Draconil, Bravo)	1.98	2.04		ug/L		103	70 - 130	7	20	
Chlorpyrifos	1.98	2.06		ug/L		104	70 - 130	8	20	
Chrysene	1.98	1.95		ug/L		99	70 - 130	4	20	
delta-BHC	1.98	2.06		ug/L		104	70 - 130	7	20	
Di(2-ethylhexyl)adipate	1.98	2.12		ug/L		107	70 - 130	7	20	
Dibenz(a,h)anthracene	1.98	1.96		ug/L		99	70 - 130	6	20	
Diclorvos (DDVP)	1.98	2.05		ug/L		104	70 - 130	10	20	
Dieldrin	1.98	1.95		ug/L		99	70 - 130	5	20	
Diethylphthalate	1.98	2.02		ug/L		102	70 - 130	6	20	
Dimethylphthalate	1.98	2.00		ug/L		101	70 - 130	7	20	
Di-n-butyl phthalate	3.95	4.25		ug/L		107	70 - 130	6	20	
Di-n-octyl phthalate	1.98	2.00		ug/L		101	70 - 130	12	20	
Endosulfan I (Alpha)	1.98	1.98		ug/L		100	70 - 130	5	20	
Endosulfan II (Beta)	1.98	2.02		ug/L		102	70 - 130	3	20	
Endosulfan sulfate	1.98	2.02		ug/L		102	70 - 130	2	20	
Endrin	1.98	2.15		ug/L		109	70 - 130	6	20	
Endrin aldehyde	1.98	1.91		ug/L		97	60 - 130	3	20	
EPTC	1.98	2.03		ug/L		103	70 - 130	5	20	
Fluoranthene	1.98	2.02		ug/L		102	70 - 130	4	20	
Fluorene	1.98	1.96		ug/L		99	70 - 130	5	20	
gamma-Chlordane	1.98	1.71		ug/L		87	70 - 130	4	20	
Heptachlor	1.98	2.27		ug/L		115	70 - 130	6	20	
Heptachlor epoxide (isomer B)	1.98	2.08		ug/L		105	70 - 130	5	20	
Hexachlorobenzene	1.98	1.76		ug/L		89	70 - 130	5	20	
Hexachlorocyclopentadiene	1.98	1.82		ug/L		92	70 - 130	7	20	
Indeno[1,2,3-cd]pyrene	1.98	1.98		ug/L		100	70 - 130	4	20	
Isophorone	1.98	2.10		ug/L		106	70 - 130	6	20	
Lindane	1.98	2.04		ug/L		103	70 - 130	6	20	
Malathion	1.98	2.01		ug/L		102	70 - 130	6	20	
Methoxychlor	1.98	2.19		ug/L		111	70 - 130	5	20	
Metolachlor	1.98	2.24		ug/L		113	70 - 130	5	20	
Molinate	1.98	2.08		ug/L		105	70 - 130	7	20	
Naphthalene	1.98	1.95		ug/L		99	70 - 130	4	20	
Parathion	1.98	2.13		ug/L		108	70 - 130	8	20	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: LCSD 380-139257/24-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Pendimethalin (Penoxaline)	1.98	2.04		ug/L		103	70 - 130	9	20	
Phenanthrene	1.98	1.97		ug/L		100	70 - 130	4	20	
Propachlor	1.98	2.12		ug/L		107	70 - 130	6	20	
Pyrene	1.98	2.05		ug/L		104	70 - 130	4	20	
Simazine	1.98	2.12		ug/L		107	70 - 130	8	20	
Terbacil	1.98	2.27		ug/L		115	70 - 130	10	20	
Terbutylazine	1.98	2.07		ug/L		105	70 - 130	6	20	
Thiobencarb	1.98	2.23		ug/L		113	70 - 130	5	20	
trans-Nonachlor	1.98	1.79		ug/L		91	70 - 130	3	20	
Trifluralin	1.98	1.85		ug/L		93	70 - 130	7	20	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	98		70 - 130

Lab Sample ID: MRL 380-139257/22-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	RPD
1-Methylnaphthalene	0.0993	0.102		ug/L		103	50 - 150	
2,4'-DDD	0.0993	0.0932	J	ug/L		94	50 - 150	
2,4'-DDE	0.0993	0.0988	J	ug/L		100	50 - 150	
2,4'-DDT	0.0993	0.103		ug/L		103	50 - 150	
2,4-Dinitrotoluene	0.0993	0.107		ug/L		108	50 - 150	
2,6-Dinitrotoluene	0.0993	0.0955	J	ug/L		96	50 - 150	
2-Methylnaphthalene	0.0993	0.0978	J	ug/L		99	50 - 150	
4,4'-DDD	0.0993	0.108		ug/L		108	50 - 150	
4,4'-DDE	0.0993	0.101		ug/L		102	50 - 150	
4,4'-DDT	0.0993	0.115		ug/L		116	50 - 150	
Acenaphthene	0.0993	0.0863	J	ug/L		87	50 - 150	
Acenaphthylene	0.0993	0.0934	J	ug/L		94	50 - 150	
Acetochlor	0.0993	0.115		ug/L		115	50 - 150	
Alachlor	0.0496	0.0511		ug/L		103	50 - 150	
alpha-BHC	0.0993	0.108		ug/L		109	50 - 150	
alpha-Chlordane	0.0248	<0.029		ug/L		99	50 - 150	
Anthracene	0.0199	0.0216		ug/L		109	50 - 150	
Atrazine	0.0496	0.0484	J	ug/L		98	50 - 150	
Benz(a)anthracene	0.0496	0.0561		ug/L		113	50 - 150	
Benzo[a]pyrene	0.0199	0.0232		ug/L		117	50 - 150	
Benzo[b]fluoranthene	0.0199	0.0206		ug/L		104	50 - 150	
Benzo[g,h,i]perylene	0.0496	0.0463	J	ug/L		93	50 - 150	
Benzo[k]fluoranthene	0.0199	0.0217		ug/L		109	50 - 150	
beta-BHC	0.0993	0.115		ug/L		116	50 - 150	
Bis(2-ethylhexyl) phthalate	0.596	0.649		ug/L		109	50 - 150	
Bromacil	0.0993	0.111		ug/L		112	50 - 150	
Butachlor	0.0496	0.0555		ug/L		112	50 - 150	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MRL 380-139257/22-A

Matrix: Water

Analysis Batch: 139310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Butylbenzylphthalate	0.496	0.585		ug/L		118	50 - 150
Chlorobenzilate	0.0993	0.0683	J	ug/L		69	50 - 150
Chloroneb	0.0993	0.0857	J	ug/L		86	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0993	0.0875	J	ug/L		88	50 - 150
Chlorpyrifos	0.0496	0.0500		ug/L		101	50 - 150
Chrysene	0.0199	0.0223		ug/L		112	50 - 150
delta-BHC	0.0993	0.106		ug/L		107	50 - 150
Di(2-ethylhexyl)adipate	0.596	0.713		ug/L		120	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0464	J	ug/L		94	50 - 150
Diclorvos (DDVP)	0.0496	0.0571		ug/L		115	50 - 150
Dieldrin	0.00993	0.00921	J	ug/L		93	50 - 150
Diethylphthalate	0.496	0.519		ug/L		105	50 - 150
Dimethylphthalate	0.496	0.518		ug/L		104	50 - 150
Di-n-butyl phthalate	0.496	0.636	J	ug/L		128	49 - 243
Di-n-octyl phthalate	0.0993	0.101		ug/L		102	50 - 150
Endosulfan I (Alpha)	0.0993	0.0913	J	ug/L		92	50 - 150
Endosulfan II (Beta)	0.0993	0.106		ug/L		107	50 - 150
Endosulfan sulfate	0.0993	0.108		ug/L		109	50 - 150
Endrin	0.00993	0.0144		ug/L		145	50 - 150
Endrin aldehyde	0.0993	0.103		ug/L		104	50 - 150
EPTC	0.0993	0.0983	J	ug/L		99	50 - 150
Fluoranthene	0.0993	0.0997		ug/L		100	50 - 150
Fluorene	0.0496	0.0511		ug/L		103	50 - 150
gamma-Chlordane	0.0248	0.0222	J	ug/L		90	50 - 150
Heptachlor	0.00993	0.0125		ug/L		126	50 - 150
Heptachlor epoxide (isomer B)	0.00993	0.0113		ug/L		114	50 - 150
Hexachlorobenzene	0.0496	0.0448	J	ug/L		90	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0420	J	ug/L		85	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0474	J	ug/L		96	50 - 150
Isophorone	0.0993	0.122		ug/L		123	50 - 150
Lindane	0.00993	0.00995		ug/L		100	50 - 150
Malathion	0.0993	0.102		ug/L		103	50 - 150
Methoxychlor	0.0496	0.0651		ug/L		131	50 - 150
Metolachlor	0.0496	0.0555		ug/L		112	50 - 150
Molinate	0.0993	0.107		ug/L		107	50 - 150
Naphthalene	0.0993	0.0874	J	ug/L		88	50 - 150
Parathion	0.0993	0.0924	J	ug/L		93	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.0976	J	ug/L		98	50 - 150
Phenanthrene	0.0397	0.0349	J	ug/L		88	50 - 150
Propachlor	0.0496	0.0519		ug/L		105	50 - 150
Pyrene	0.0496	0.0520		ug/L		105	50 - 150
Simazine	0.0496	0.0482	J	ug/L		97	50 - 150
Terbacil	0.0993	0.108		ug/L		109	50 - 150
Terbutylazine	0.0993	0.103		ug/L		103	50 - 150
Thiobencarb	0.0993	0.106		ug/L		107	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		93	50 - 150
Trifluralin	0.0993	0.0977	J	ug/L		98	50 - 150

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MRL 380-139257/22-A
Matrix: Water
Analysis Batch: 139310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139257

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	97		70 - 130

Lab Sample ID: 380-137941-AI-1-A MS
Matrix: Water
Analysis Batch: 139310

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 139257

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.098		1.95	1.79		ug/L		92	70 - 130
2,4'-DDD	<0.098		1.95	1.95		ug/L		100	70 - 130
2,4'-DDE	<0.098		1.95	1.70		ug/L		87	70 - 130
2,4'-DDT	<0.098		1.95	1.82		ug/L		93	70 - 130
2,4-Dinitrotoluene	<0.098		1.95	2.03		ug/L		104	70 - 130
2,6-Dinitrotoluene	<0.098		1.95	1.85		ug/L		95	70 - 130
2-Methylnaphthalene	<0.098		1.95	1.81		ug/L		93	70 - 130
4,4'-DDD	<0.098		1.95	2.00		ug/L		103	70 - 130
4,4'-DDE	<0.098		1.95	1.71		ug/L		88	70 - 130
4,4'-DDT	<0.098		1.95	1.68		ug/L		86	70 - 130
Acenaphthene	<0.098		1.95	1.93		ug/L		99	70 - 130
Acenaphthylene	<0.098		1.95	1.93		ug/L		99	70 - 130
Acetochlor	<0.098		1.95	2.03		ug/L		104	70 - 130
Alachlor	<0.049		1.95	1.94		ug/L		100	70 - 130
alpha-BHC	<0.098		1.95	1.95		ug/L		100	70 - 130
alpha-Chlordane	<0.049		1.95	1.76		ug/L		90	70 - 130
Anthracene	<0.020		1.95	1.77		ug/L		91	70 - 130
Atrazine	<0.049		1.95	1.98		ug/L		101	70 - 130
Benz(a)anthracene	<0.049		1.95	1.78		ug/L		91	70 - 130
Benzo[a]pyrene	<0.020		1.95	2.06		ug/L		106	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	2.13		ug/L		110	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	1.89		ug/L		97	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.07		ug/L		107	70 - 130
beta-BHC	<0.098		1.95	1.96		ug/L		100	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.95	1.87		ug/L		96	70 - 130
Bromacil	<0.098		1.95	2.04		ug/L		105	70 - 130
Butachlor	<0.049		1.95	2.18		ug/L		112	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.14		ug/L		110	70 - 130
Chlorobenzilate	<0.098		1.95	1.64		ug/L		84	70 - 130
Chloroneb	<0.098		1.95	2.06		ug/L		106	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.01		ug/L		103	70 - 130
Chlorpyrifos	<0.049		1.95	1.98		ug/L		102	70 - 130
Chrysene	<0.020		1.95	2.00		ug/L		103	70 - 130
delta-BHC	<0.098		1.95	2.03		ug/L		104	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.95	1.64		ug/L		84	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	1.81		ug/L		93	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.01		ug/L		103	70 - 130
Dieldrin	<0.0098		1.95	1.91		ug/L		98	70 - 130
Diethylphthalate	<0.49		1.95	1.97		ug/L		101	70 - 130

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: 380-137941-AI-1-A MS
Matrix: Water
Analysis Batch: 139310

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 139257

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Dimethylphthalate	<0.49		1.95	1.97		ug/L		101	70 - 130
Di-n-butyl phthalate	<0.98		3.89	4.16		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.098		1.95	1.59		ug/L		82	70 - 130
Endosulfan I (Alpha)	<0.098		1.95	1.92		ug/L		99	70 - 130
Endosulfan II (Beta)	<0.098		1.95	2.05		ug/L		105	70 - 130
Endosulfan sulfate	<0.098		1.95	2.05		ug/L		105	70 - 130
Endrin	<0.0098		1.95	2.12		ug/L		109	70 - 130
Endrin aldehyde	<0.098		1.95	1.57		ug/L		81	60 - 130
EPTC	<0.098		1.95	1.98		ug/L		102	70 - 130
Fluoranthene	<0.098		1.95	1.99		ug/L		102	70 - 130
Fluorene	<0.049		1.95	1.90		ug/L		98	70 - 130
gamma-Chlordane	<0.049		1.95	1.63		ug/L		84	70 - 130
Heptachlor	<0.0098		1.95	2.23		ug/L		115	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		1.95	2.06		ug/L		106	70 - 130
Hexachlorobenzene	<0.049		1.95	1.66		ug/L		85	70 - 130
Hexachlorocyclopentadiene	<0.049		1.95	1.78		ug/L		91	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.95	1.87		ug/L		96	70 - 130
Isophorone	<0.098		1.95	1.98		ug/L		102	70 - 130
Lindane	<0.0098		1.95	1.97		ug/L		101	70 - 130
Malathion	<0.098		1.95	1.99		ug/L		102	70 - 130
Methoxychlor	<0.049	F1	1.95	2.60	F1	ug/L		133	70 - 130
Metolachlor	<0.049		1.95	2.24		ug/L		115	70 - 130
Molinate	<0.098		1.95	2.03		ug/L		104	70 - 130
Naphthalene	<0.098		1.95	1.94		ug/L		99	70 - 130
Parathion	<0.098		1.95	2.11		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.95	2.04		ug/L		105	70 - 130
Phenanthrene	<0.039		1.95	1.96		ug/L		101	70 - 130
Propachlor	<0.049		1.95	2.07		ug/L		107	70 - 130
Pyrene	<0.049		1.95	2.02		ug/L		104	70 - 130
Simazine	<0.049		1.95	2.03		ug/L		104	70 - 130
Terbacil	<0.098		1.95	2.27		ug/L		117	70 - 130
Terbutylazine	<0.098		1.95	1.97		ug/L		101	70 - 130
Thiobencarb	<0.098		1.95	2.23		ug/L		115	70 - 130
trans-Nonachlor	<0.049		1.95	1.68		ug/L		86	70 - 130
Trifluralin	<0.098		1.95	1.79		ug/L		92	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	100		70 - 130

Lab Sample ID: 380-138045-1 DU
Matrix: Water
Analysis Batch: 139310

Client Sample ID: HALAWA SHAFT VIEWING POOL
Prep Type: Total/NA
Prep Batch: 139257

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.098		<0.099		ug/L		NC	20
2,4'-DDD	<0.098		<0.099		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: 380-138045-1 DU

Matrix: Water

Analysis Batch: 139310

Client Sample ID: HALAWA SHAFT VIEWING POOL

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,4'-DDE	<0.098		<0.099		ug/L		NC	20
2,4'-DDT	<0.098		<0.099		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.099		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.099		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.099		ug/L		NC	20
4,4'-DDD	<0.098		<0.099		ug/L		NC	20
4,4'-DDE	<0.098		<0.099		ug/L		NC	20
4,4'-DDT	<0.098		<0.099		ug/L		NC	20
Acenaphthene	<0.098		<0.099		ug/L		NC	20
Acenaphthylene	<0.098		<0.099		ug/L		NC	20
Acetochlor	<0.098		<0.099		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.099		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		<0.099		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.59		ug/L		NC	20
Bromacil	<0.098		<0.099		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		<0.099		ug/L		NC	20
Chloroneb	<0.098		<0.099		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.099		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		<0.099		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		<0.0099		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		<0.99		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.099		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.099		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.099		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.099		ug/L		NC	20
Endrin	<0.0098		<0.0099		ug/L		NC	20
Endrin aldehyde	<0.098		<0.099		ug/L		NC	20
EPTC	<0.098		<0.099		ug/L		NC	20
Fluoranthene	<0.098		<0.099		ug/L		NC	20
Fluorene	<0.049		<0.049		ug/L		NC	20
gamma-Chlordane	<0.049		<0.049		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: 380-138045-1 DU

Matrix: Water

Analysis Batch: 139310

Client Sample ID: HALAWA SHAFT VIEWING POOL

Prep Type: Total/NA

Prep Batch: 139257

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Heptachlor	<0.0098		<0.0099		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0098		<0.0099		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		<0.099		ug/L		NC	20
Lindane	<0.0098		<0.0099		ug/L		NC	20
Malathion	<0.098		<0.099		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		<0.099		ug/L		NC	20
Naphthalene	<0.098		<0.099		ug/L		NC	20
Parathion	<0.098		<0.099		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098		<0.099		ug/L		NC	20
Phenanthrene	<0.039		<0.040		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		<0.099		ug/L		NC	20
Terbutylazine	<0.098		<0.099		ug/L		NC	20
Thiobencarb	<0.098		<0.099		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		<0.099		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	95		70 - 130

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

Lab Sample ID: MB 570-540166/1-A

Matrix: Water

Analysis Batch: 544507

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 540166

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	03/03/25 05:43	03/13/25 10:33	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	78		33 - 139	03/03/25 05:43	03/13/25 10:33	1
2-Fluorobiphenyl (Surr)	67		33 - 126	03/03/25 05:43	03/13/25 10:33	1
2-Fluorophenol (Surr)	34		12 - 120	03/03/25 05:43	03/13/25 10:33	1
Nitrobenzene-d5 (Surr)	61		36 - 120	03/03/25 05:43	03/13/25 10:33	1
Phenol-d6 (Surr)	22		10 - 120	03/03/25 05:43	03/13/25 10:33	1
p-Terphenyl-d14 (Surr)	83		47 - 131	03/03/25 05:43	03/13/25 10:33	1

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MB 570-540166/1-A
Matrix: Water
Analysis Batch: 542212

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 540166

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
2-Methylnaphthalene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Acenaphthene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Acenaphthylene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Anthracene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Benzo[a]anthracene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Benzo[a]pyrene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Chrysene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Fluoranthene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Fluorene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Naphthalene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Phenanthrene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1
Pyrene	<0.20		0.20	ug/L		03/03/25 05:43	03/07/25 14:28	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	55		28 - 127	03/03/25 05:43	03/07/25 14:28	1
2-Fluorobiphenyl (Surr)	58		31 - 120	03/03/25 05:43	03/07/25 14:28	1
2-Fluorophenol (Surr)	33		17 - 120	03/03/25 05:43	03/07/25 14:28	1
Nitrobenzene-d5 (Surr)	57		27 - 120	03/03/25 05:43	03/07/25 14:28	1
Phenol-d6 (Surr)	20		10 - 120	03/03/25 05:43	03/07/25 14:28	1
p-Terphenyl-d14 (Surr)	67		45 - 120	03/03/25 05:43	03/07/25 14:28	1

Lab Sample ID: LCS 570-540166/2-A
Matrix: Water
Analysis Batch: 542212

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 540166

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	20.0	12.0		ug/L		60	47 - 120
2-Methylnaphthalene	20.0	13.4		ug/L		67	43 - 120
Acenaphthene	20.0	14.4		ug/L		72	60 - 132
Acenaphthylene	20.0	14.3		ug/L		71	54 - 126
Anthracene	20.0	14.5		ug/L		73	43 - 120
Benzo[a]anthracene	20.0	14.9		ug/L		74	42 - 133
Benzo[a]pyrene	20.0	16.6		ug/L		83	32 - 148
Benzo[b]fluoranthene	20.0	15.7		ug/L		79	42 - 140
Benzo[g,h,i]perylene	20.0	14.6		ug/L		73	1 - 195
Benzo[k]fluoranthene	20.0	15.8		ug/L		79	25 - 146
Chrysene	20.0	14.1		ug/L		71	44 - 140
Dibenz(a,h)anthracene	20.0	15.2		ug/L		76	1 - 200
Fluoranthene	20.0	14.8		ug/L		74	43 - 121
Fluorene	20.0	14.9		ug/L		75	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	15.7		ug/L		79	1 - 151
Naphthalene	20.0	12.4		ug/L		62	36 - 120

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: LCS 570-540166/2-A

Matrix: Water

Analysis Batch: 542212

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 540166

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Phenanthrene	20.0	14.5		ug/L		73	65 - 120
Pyrene	20.0	14.5		ug/L		73	70 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	62		28 - 127
2-Fluorobiphenyl (Surr)	69		31 - 120
2-Fluorophenol (Surr)	40		17 - 120
Nitrobenzene-d5 (Surr)	62		27 - 120
Phenol-d6 (Surr)	26		10 - 120
p-Terphenyl-d14 (Surr)	70		45 - 120

Lab Sample ID: LCSD 570-540166/3-A

Matrix: Water

Analysis Batch: 542212

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 540166

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
1-Methylnaphthalene	20.0	12.7		ug/L		64	47 - 120	6	20
2-Methylnaphthalene	20.0	14.2		ug/L		71	43 - 120	5	20
Acenaphthene	20.0	15.8		ug/L		79	60 - 132	9	29
Acenaphthylene	20.0	15.6		ug/L		78	54 - 126	9	45
Anthracene	20.0	15.9		ug/L		80	43 - 120	9	40
Benzo[a]anthracene	20.0	16.1		ug/L		80	42 - 133	8	32
Benzo[a]pyrene	20.0	17.8		ug/L		89	32 - 148	7	43
Benzo[b]fluoranthene	20.0	16.9		ug/L		85	42 - 140	7	43
Benzo[g,h,i]perylene	20.0	15.7		ug/L		78	1 - 195	7	61
Benzo[k]fluoranthene	20.0	16.7		ug/L		84	25 - 146	6	38
Chrysene	20.0	15.5		ug/L		77	44 - 140	9	53
Dibenz(a,h)anthracene	20.0	16.5		ug/L		83	1 - 200	9	75
Fluoranthene	20.0	16.2		ug/L		81	43 - 121	9	40
Fluorene	20.0	16.0		ug/L		80	70 - 120	7	23
Indeno[1,2,3-cd]pyrene	20.0	16.7		ug/L		83	1 - 151	6	60
Naphthalene	20.0	13.6		ug/L		68	36 - 120	9	39
Phenanthrene	20.0	15.7		ug/L		79	65 - 120	8	24
Pyrene	20.0	16.0		ug/L		80	70 - 120	9	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	69		28 - 127
2-Fluorobiphenyl (Surr)	76		31 - 120
2-Fluorophenol (Surr)	44		17 - 120
Nitrobenzene-d5 (Surr)	67		27 - 120
Phenol-d6 (Surr)	29		10 - 120
p-Terphenyl-d14 (Surr)	74		45 - 120

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MB 570-541268/6
Matrix: Water
Analysis Batch: 541268

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			03/05/25 12:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134				03/05/25 12:21	1

Lab Sample ID: LCS 570-541268/4
Matrix: Water
Analysis Batch: 541268

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	436		ug/L		109	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		38 - 134				

Lab Sample ID: LCSD 570-541268/7
Matrix: Water
Analysis Batch: 541268

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	400	438		ug/L		109	78 - 120	1	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	97		38 - 134						

Lab Sample ID: MRL 570-541268/3
Matrix: Water
Analysis Batch: 541268

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	12.8		ug/L		128	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	79		38 - 134				

Lab Sample ID: 380-137752-C-1 MS
Matrix: Water
Analysis Batch: 541268

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	439		ug/L		110	68 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		38 - 134						

Euromins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: 380-137752-C-1 MSD
Matrix: Water
Analysis Batch: 541268

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	410		ug/L		103	68 - 122	7	18
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	98		38 - 134								

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

Lab Sample ID: MB 570-541050/1-A
Matrix: Water
Analysis Batch: 543274

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 541050

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		03/04/25 18:17	03/11/25 05:37	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		03/04/25 18:17	03/11/25 05:37	1
C8-C18	<25		25	ug/L		03/04/25 18:17	03/11/25 05:37	1
Surrogate	%Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	103		60 - 130	03/04/25 18:17	03/11/25 05:37	1		

Lab Sample ID: LCS 570-541050/2-A
Matrix: Water
Analysis Batch: 543274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1420		ug/L		89	56 - 127
Surrogate	%Recovery	LCS Qualifier	LCS Limits				
n-Octacosane (Surr)	97		60 - 130				

Lab Sample ID: LCSD 570-541050/3-A
Matrix: Water
Analysis Batch: 543274

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 541050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1530		ug/L		96	56 - 127	7	23
Surrogate	%Recovery	LCSD Qualifier	LCSD Limits						
n-Octacosane (Surr)	99		60 - 130						

Lab Sample ID: MRL 570-541050/4-A
Matrix: Water
Analysis Batch: 543274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541050

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	<0.020		mg/L		80	50 - 150

QC Sample Results

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

Job ID: 380-138045-1
SDG: Weekly

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

Lab Sample ID: MRL 570-541050/4-A
Matrix: Water
Analysis Batch: 543274

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 541050

<i>Surrogate</i>	<i>MRL</i>	<i>MRL</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>n-Octacosane (Surr)</i>	107		60 - 130

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

QC Association Summary

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

Job ID: 380-138045-1
 SDG: Weekly

GC/MS Semi VOA

Prep Batch: 139257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
MB 380-139257/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-139257/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-139257/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-139257/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-137941-AI-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-138045-1 DU	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	

Analysis Batch: 139310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	139257
MB 380-139257/21-A	Method Blank	Total/NA	Water	525.2	139257
LCS 380-139257/23-A	Lab Control Sample	Total/NA	Water	525.2	139257
LCSD 380-139257/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	139257
MRL 380-139257/22-A	Lab Control Sample	Total/NA	Water	525.2	139257
380-137941-AI-1-A MS	Matrix Spike	Total/NA	Water	525.2	139257
380-138045-1 DU	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	139257

Prep Batch: 540166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	
MB 570-540166/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-540166/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-540166/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 542212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1 SIM	540166
MB 570-540166/1-A	Method Blank	Total/NA	Water	625.1 SIM	540166
LCS 570-540166/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	540166
LCSD 570-540166/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	540166

Analysis Batch: 544507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	540166
MB 570-540166/1-A	Method Blank	Total/NA	Water	625.1	540166

GC VOA

Analysis Batch: 541268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
380-138045-2	TRIP BLANK	Total/NA	Water	8015B GRO LL	
MB 570-541268/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-541268/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-541268/7	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-541268/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-137752-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-137752-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-138045-1
 SDG: Weekly

GC Semi VOA

Prep Batch: 541050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	3510C	
MB 570-541050/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-541050/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-541050/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-541050/4-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 543274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-138045-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B	541050
MB 570-541050/1-A	Method Blank	Total/NA	Water	8015B	541050
LCS 570-541050/2-A	Lab Control Sample	Total/NA	Water	8015B	541050
LCSD 570-541050/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	541050
MRL 570-541050/4-A	Lab Control Sample	Total/NA	Water	8015B	541050



Lab Chronicle

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

Job ID: 380-138045-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-138045-1

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			139257	OTM3	EA POM	03/03/25 06:17
Total/NA	Analysis	525.2		1	139310	UPAC	EA POM	03/03/25 19:12
Total/NA	Prep	625.1			540166	H1SH	EET CAL 4	03/03/25 05:43
Total/NA	Analysis	625.1		1	544507	J7WE	EET CAL 4	03/13/25 10:56
Total/NA	Prep	625.1			540166	H1SH	EET CAL 4	03/03/25 05:43
Total/NA	Analysis	625.1 SIM		1	542212	PQS1	EET CAL 4	03/07/25 15:55
Total/NA	Analysis	8015B GRO LL		1	541268	A9VE	EET CAL 4	03/05/25 19:20
Total/NA	Prep	3510C			541050	TVD6	EET CAL 4	03/04/25 18:17
Total/NA	Analysis	8015B		1	543274	E5RH	EET CAL 4	03/11/25 06:40

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-138045-2

Date Collected: 02/25/25 10:00

Matrix: Water

Date Received: 02/27/25 10:03

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	541268	A9VE	EET CAL 4	03/05/25 23:30

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: 380-138045-1
 SDG: Weekly

Laboratory: Eurofins Eaton Analytical Pomona

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

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

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

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

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

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-138045-1
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	CA001112025-8	02-28-26
Washington	State	C916	10-11-25

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

Method Summary

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

Job ID: 380-138045-1
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: 380-138045-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-138045-1	HALAWA SHAFT VIEWING POOL	Water	02/25/25 10:00	02/27/25 10:03
380-138045-2	TRIP BLANK	Water	02/25/25 10:00	02/27/25 10:03

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-138045-1

SDG Number: Weekly

Login Number: 138045

List Number: 1

Creator: Ngo, Theodore

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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: 380-138045-1

SDG Number: Weekly

Login Number: 138045

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 02/28/25 02:25 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ 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	2.3
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 <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	