

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly
RUSH Weekly Red Hill

JOB NUMBER

380-142743-1

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: 380-142743-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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: 380-142743-1

Job ID: 380-142743-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-142743-1

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 3/28/2025 10:06 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 1.8°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

Method 8015B_GRO_LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 570-552661 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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 570-552140 and analytical batch 570-554496 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: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

No Detections.

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-2

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: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

Date Collected: 03/25/25 10:00

Matrix: Drinking Water

Date Received: 03/28/25 10:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2,4'-DDD	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2,4'-DDE	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2,4'-DDT	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
2-Methylnaphthalene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
4,4'-DDD	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
4,4'-DDE	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
4,4'-DDT	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Acenaphthene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Acenaphthylene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Acetochlor	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Alachlor	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
alpha-BHC	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
alpha-Chlordane	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Anthracene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 15:56	1
Atrazine	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Benz(a)anthracene	<0.048	^3+	0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Benzo[a]pyrene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 15:56	1
Benzo[b]fluoranthene	<0.019	^3+	0.019	ug/L		03/30/25 11:18	03/31/25 15:56	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 15:56	1
beta-BHC	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		03/30/25 11:18	03/31/25 15:56	1
Bromacil	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Butachlor	<0.048	^3+	0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Butylbenzylphthalate	<0.48		0.48	ug/L		03/30/25 11:18	03/31/25 15:56	1
Chlorobenzilate	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Chloroneb	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Chlorpyrifos	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Chrysene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 15:56	1
delta-BHC	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		03/30/25 11:18	03/31/25 15:56	1
Dibenz(a,h)anthracene	<0.048	^3+	0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Dieldrin	<0.0096		0.0096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Diethylphthalate	<0.48		0.48	ug/L		03/30/25 11:18	03/31/25 15:56	1
Dimethylphthalate	<0.48		0.48	ug/L		03/30/25 11:18	03/31/25 15:56	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		03/30/25 11:18	03/31/25 15:56	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Endosulfan sulfate	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Endrin	<0.0096		0.0096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Endrin aldehyde	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
EPTC	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Fluoranthene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

Date Collected: 03/25/25 10:00

Matrix: Drinking Water

Date Received: 03/28/25 10:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
gamma-Chlordane	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Heptachlor	<0.0096		0.0096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Hexachlorobenzene	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Indeno[1,2,3-cd]pyrene	<0.048	^3+	0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Isophorone	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Lindane	<0.0096		0.0096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Malathion	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Methoxychlor	<0.048	^3+	0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Metolachlor	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Molinate	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Naphthalene	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Parathion	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Phenanthrene	<0.039		0.039	ug/L		03/30/25 11:18	03/31/25 15:56	1
Propachlor	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Pyrene	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Simazine	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Terbacil	<0.096	^3+	0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Terbutylazine	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Thiobencarb	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		03/30/25 11:18	03/31/25 15:56	1
trans-Nonachlor	<0.048		0.048	ug/L		03/30/25 11:18	03/31/25 15:56	1
Trifluralin	<0.096		0.096	ug/L		03/30/25 11:18	03/31/25 15:56	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Hexazinone	0.15	^3+	ug/L		8.61	51235-04-2	03/30/25 11:18	03/31/25 15:56	1
Tentatively Identified Compound	None		ug/L			N/A	03/30/25 11:18	03/31/25 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	03/30/25 11:18	03/31/25 15:56	1
Perylene-d12	78		70 - 130	03/30/25 11:18	03/31/25 15:56	1
Triphenylphosphate	97		70 - 130	03/30/25 11:18	03/31/25 15:56	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		03/29/25 14:41	04/08/25 17:40	1
2-Methylnaphthalene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Acenaphthene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Acenaphthylene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Anthracene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Benzo[a]anthracene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Benzo[a]pyrene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Chrysene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

Date Collected: 03/25/25 10:00

Matrix: Drinking Water

Date Received: 03/28/25 10:06

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Fluorene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Naphthalene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Phenanthrene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1
Pyrene	<0.19		0.19	ug/L		03/29/25 14:41	04/08/25 17:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		28 - 127	03/29/25 14:41	04/08/25 17:40	1
2-Fluorobiphenyl (Surr)	87		31 - 120	03/29/25 14:41	04/08/25 17:40	1
2-Fluorophenol (Surr)	42		17 - 120	03/29/25 14:41	04/08/25 17:40	1
Nitrobenzene-d5 (Surr)	87		27 - 120	03/29/25 14:41	04/08/25 17:40	1
Phenol-d6 (Surr)	25		10 - 120	03/29/25 14:41	04/08/25 17:40	1
p-Terphenyl-d14 (Surr)	97		45 - 120	03/29/25 14:41	04/08/25 17:40	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
Unknown	7.4	T J	ug/L		2.15	N/A	03/29/25 14:41	04/09/25 21:40	1
2,3,3-Trimethyl-1-hexene	7.8	T J N	ug/L		2.30	1000113-52-1	03/29/25 14:41	04/09/25 21:40	1
Unknown	21	T J	ug/L		2.55	N/A	03/29/25 14:41	04/09/25 21:40	1
2-Pentenal, (E)-	58	T J N	ug/L		2.78	1576-87-0	03/29/25 14:41	04/09/25 21:40	1
Cyclododecane	23	T J N	ug/L		2.88	294-62-2	03/29/25 14:41	04/09/25 21:40	1
Unknown	13	T J	ug/L		2.97	N/A	03/29/25 14:41	04/09/25 21:40	1
Cyclohexane, 1-methyl-3-propyl-	35	T J N	ug/L		3.01	4291-80-9	03/29/25 14:41	04/09/25 21:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		33 - 139	03/29/25 14:41	04/09/25 21:40	1
2-Fluorobiphenyl (Surr)	86		33 - 126	03/29/25 14:41	04/09/25 21:40	1
2-Fluorophenol (Surr)	45		12 - 120	03/29/25 14:41	04/09/25 21:40	1
Nitrobenzene-d5 (Surr)	90		36 - 120	03/29/25 14:41	04/09/25 21:40	1
Phenol-d6 (Surr)	21		10 - 120	03/29/25 14:41	04/09/25 21:40	1
p-Terphenyl-d14 (Surr)	100		47 - 131	03/29/25 14:41	04/09/25 21:40	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			04/03/25 00:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		38 - 134		04/03/25 00:37	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		04/01/25 11:10	04/07/25 15:57	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/01/25 11:10	04/07/25 15:57	1
C8-C18	<25		25	ug/L		04/01/25 11:10	04/07/25 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	126		60 - 130	04/01/25 11:10	04/07/25 15:57	1

Client Sample Results

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

Job ID: 380-142743-1
 SDG: Weekly

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-2

Date Collected: 03/25/25 10:00

Matrix: Water

Date Received: 03/28/25 10:06

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			04/02/25 21:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		38 - 134				04/02/25 21:19	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: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

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

Surrogate Summary

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

Job ID: 380-142743-1
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)
380-142743-1	Halawa Shaft Viewing Pool	97	78	97

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)
380-142560-B-1-A DU	Duplicate	98	95	105
380-142616-B-1-A MS	Matrix Spike	98	100	104
LCS 380-144467/23-A	Lab Control Sample	99	97	111
MB 380-144467/21-A	Method Blank	96	90	109
MRL 380-144467/22-A	Lab Control Sample	98	88	105

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)
380-142743-1	Halawa Shaft Viewing Pool	89	86	45	90	21	100

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 570-551286/1-A	Method Blank	90	74	47	80	27	90

Surrogate Legend
 TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)
 NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-142743-1

Project/Site: RED-HILL

SDG: Weekly

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-142743-1	Halawa Shaft Viewing Pool	78	87	42	87	25	97

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-142747-A-1-B MS	Matrix Spike	80	85	45	80	29	88
380-142747-A-1-C MSD	Matrix Spike Duplicate	84	84	43	82	27	88
LCS 570-551286/2-A	Lab Control Sample	86	92	52	77	34	98
LCSD 570-551286/3-A	Lab Control Sample Dup	82	86	54	74	34	90
MB 570-551286/1-A	Method Blank	70	71	38	70	22	81

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

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-142743-1	Halawa Shaft Viewing Pool	90

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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)
380-142743-2	TB: Halawa Shaft Viewing Pool	92
380-142747-C-1 MS	Matrix Spike	92
380-142747-C-1 MSD	Matrix Spike Duplicate	94

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Surrogate Summary

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

Job ID: 380-142743-1
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)
LCS 570-552661/4	Lab Control Sample	93
LCSD 570-552661/5	Lab Control Sample Dup	95
MB 570-552661/6	Method Blank	90
MRL 570-552661/3	Lab Control Sample	90

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)
380-142743-1	Halawa Shaft Viewing Pool	126

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)
380-142747-B-1-A MS	Matrix Spike	106
380-142747-B-1-B MSD	Matrix Spike Duplicate	104
LCS 570-552140/2-A	Lab Control Sample	107
LCSD 570-552140/3-A	Lab Control Sample Dup	108
MB 570-552140/1-A	Method Blank	112
MRL 570-552140/4-A	Lab Control Sample	110

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MB 380-144467/21-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144467

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2,4'-DDD	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2,4'-DDE	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2,4'-DDT	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
2-Methylnaphthalene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
4,4'-DDD	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
4,4'-DDE	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
4,4'-DDT	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Acenaphthene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Acenaphthylene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Acetochlor	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Alachlor	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
alpha-BHC	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
alpha-Chlordane	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Anthracene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 14:55	1
Atrazine	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Benz(a)anthracene	<0.049	^3+	0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Benzo[a]pyrene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 14:55	1
Benzo[b]fluoranthene	<0.019	^3+	0.019	ug/L		03/30/25 11:18	03/31/25 14:55	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 14:55	1
beta-BHC	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		03/30/25 11:18	03/31/25 14:55	1
Bromacil	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Butachlor	<0.049	^3+	0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Butylbenzylphthalate	<0.49		0.49	ug/L		03/30/25 11:18	03/31/25 14:55	1
Chlorobenzilate	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Chloroneb	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Chlorpyrifos	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Chrysene	<0.019		0.019	ug/L		03/30/25 11:18	03/31/25 14:55	1
delta-BHC	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		03/30/25 11:18	03/31/25 14:55	1
Dibenz(a,h)anthracene	<0.049	^3+	0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Dieldrin	<0.0097		0.0097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Diethylphthalate	<0.49		0.49	ug/L		03/30/25 11:18	03/31/25 14:55	1
Dimethylphthalate	<0.49		0.49	ug/L		03/30/25 11:18	03/31/25 14:55	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		03/30/25 11:18	03/31/25 14:55	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Endosulfan sulfate	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Endrin	<0.0097		0.0097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Endrin aldehyde	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
EPTC	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1

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QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MB 380-144467/21-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 144467

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Fluorene	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
gamma-Chlordane	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Heptachlor	<0.0097		0.0097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Hexachlorobenzene	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Indeno[1,2,3-cd]pyrene	<0.049	^3+	0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Isophorone	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Lindane	<0.0097		0.0097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Malathion	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Methoxychlor	<0.049	^3+	0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Metolachlor	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Molinate	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Naphthalene	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Parathion	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Phenanthrene	<0.039		0.039	ug/L		03/30/25 11:18	03/31/25 14:55	1
Propachlor	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Pyrene	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Simazine	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Terbacil	<0.097	^3+	0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Terbutylazine	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Thiobencarb	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		03/30/25 11:18	03/31/25 14:55	1
trans-Nonachlor	<0.049		0.049	ug/L		03/30/25 11:18	03/31/25 14:55	1
Trifluralin	<0.097		0.097	ug/L		03/30/25 11:18	03/31/25 14:55	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1.12	T J	ug/L		2.65	N/A	03/30/25 11:18	03/31/25 14:55	1
Cyclotetrasiloxane, octamethyl-	0.493	T J N	ug/L		2.87	556-67-2	03/30/25 11:18	03/31/25 14:55	1
Decane	2.42	T J N	ug/L		2.91	124-18-5	03/30/25 11:18	03/31/25 14:55	1
Unknown	0.515	T J	ug/L		3.29	N/A	03/30/25 11:18	03/31/25 14:55	1
Tetradecanamide	1.88	T J N	ug/L		7.30	638-58-4	03/30/25 11:18	03/31/25 14:55	1
13-Docosenamide, (Z)-	4.62	T J N	ug/L		10.88	112-84-5	03/30/25 11:18	03/31/25 14:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	03/30/25 11:18	03/31/25 14:55	1
Perylene-d12	90		70 - 130	03/30/25 11:18	03/31/25 14:55	1
Triphenylphosphate	109		70 - 130	03/30/25 11:18	03/31/25 14:55	1

Lab Sample ID: LCS 380-144467/23-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.94	1.97		ug/L		102	70 - 130
2,4'-DDD	1.94	2.16		ug/L		111	70 - 130

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QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: LCS 380-144467/23-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDE	1.94	2.15		ug/L		111	70 - 130
2,4'-DDT	1.94	1.93		ug/L		99	70 - 130
2,4-Dinitrotoluene	1.94	1.92		ug/L		99	70 - 130
2,6-Dinitrotoluene	1.94	1.91		ug/L		99	70 - 130
2-Methylnaphthalene	1.94	1.96		ug/L		101	70 - 130
4,4'-DDD	1.94	1.98		ug/L		102	70 - 130
4,4'-DDE	1.94	2.00		ug/L		103	70 - 130
4,4'-DDT	1.94	2.02		ug/L		104	70 - 130
Acenaphthene	1.94	1.97		ug/L		101	70 - 130
Acenaphthylene	1.94	2.01		ug/L		104	70 - 130
Acetochlor	1.94	2.25		ug/L		116	70 - 130
Alachlor	1.94	2.02		ug/L		104	70 - 130
alpha-BHC	1.94	2.03		ug/L		105	70 - 130
alpha-Chlordane	1.94	1.93		ug/L		99	70 - 130
Anthracene	1.94	2.04		ug/L		105	70 - 130
Atrazine	1.94	2.00		ug/L		103	70 - 130
Benz(a)anthracene	1.94	1.99		ug/L		102	70 - 130
Benzo[a]pyrene	1.94	2.10		ug/L		108	70 - 130
Benzo[b]fluoranthene	1.94	2.28		ug/L		117	70 - 130
Benzo[g,h,i]perylene	1.94	1.97		ug/L		101	70 - 130
Benzo[k]fluoranthene	1.94	2.12		ug/L		109	70 - 130
beta-BHC	1.94	2.13		ug/L		110	70 - 130
Bis(2-ethylhexyl) phthalate	1.94	2.08		ug/L		107	70 - 130
Bromacil	1.94	2.15		ug/L		110	70 - 130
Butachlor	1.94	2.27		ug/L		117	70 - 130
Butylbenzylphthalate	1.94	2.29		ug/L		118	70 - 130
Chlorobenzilate	1.94	2.23		ug/L		115	70 - 130
Chloroneb	1.94	2.06		ug/L		106	70 - 130
Chlorothalonil (Draconil, Bravo)	1.94	1.94		ug/L		100	70 - 130
Chlorpyrifos	1.94	2.01		ug/L		104	70 - 130
Chrysene	1.94	2.12		ug/L		109	70 - 130
delta-BHC	1.94	2.08		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	1.94	2.40		ug/L		123	70 - 130
Dibenz(a,h)anthracene	1.94	2.01		ug/L		103	70 - 130
Diclorvos (DDVP)	1.94	2.23		ug/L		115	70 - 130
Dieldrin	1.94	2.11		ug/L		109	70 - 130
Diethylphthalate	1.94	2.12		ug/L		109	70 - 130
Dimethylphthalate	1.94	2.09		ug/L		108	70 - 130
Di-n-butyl phthalate	3.89	4.56		ug/L		117	70 - 130
Di-n-octyl phthalate	1.94	2.08		ug/L		107	70 - 130
Endosulfan I (Alpha)	1.94	2.09		ug/L		107	70 - 130
Endosulfan II (Beta)	1.94	2.14		ug/L		110	70 - 130
Endosulfan sulfate	1.94	1.97		ug/L		102	70 - 130
Endrin	1.94	2.17		ug/L		112	70 - 130
Endrin aldehyde	1.94	2.02		ug/L		104	60 - 130
EPTC	1.94	2.16		ug/L		111	70 - 130
Fluoranthene	1.94	2.04		ug/L		105	70 - 130
Fluorene	1.94	2.05		ug/L		106	70 - 130
gamma-Chlordane	1.94	1.90		ug/L		98	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: LCS 380-144467/23-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor	1.94	2.07		ug/L		107	70 - 130
Heptachlor epoxide (isomer B)	1.94	2.04		ug/L		105	70 - 130
Hexachlorobenzene	1.94	1.83		ug/L		94	70 - 130
Hexachlorocyclopentadiene	1.94	1.94		ug/L		100	70 - 130
Indeno[1,2,3-cd]pyrene	1.94	2.14		ug/L		110	70 - 130
Isophorone	1.94	2.13		ug/L		109	70 - 130
Lindane	1.94	2.05		ug/L		106	70 - 130
Malathion	1.94	2.05		ug/L		106	70 - 130
Methoxychlor	1.94	2.14		ug/L		110	70 - 130
Metolachlor	1.94	2.09		ug/L		108	70 - 130
Molinate	1.94	2.20		ug/L		113	70 - 130
Naphthalene	1.94	1.90		ug/L		98	70 - 130
Parathion	1.94	2.20		ug/L		113	70 - 130
Pendimethalin (Penoxaline)	1.94	2.04		ug/L		105	70 - 130
Phenanthrene	1.94	1.92		ug/L		99	70 - 130
Propachlor	1.94	2.26		ug/L		117	70 - 130
Pyrene	1.94	2.04		ug/L		105	70 - 130
Simazine	1.94	1.96		ug/L		101	70 - 130
Terbacil	1.94	2.33		ug/L		120	70 - 130
Terbutylazine	1.94	2.00		ug/L		103	70 - 130
Thiobencarb	1.94	2.09		ug/L		108	70 - 130
trans-Nonachlor	1.94	1.88		ug/L		97	70 - 130
Trifluralin	1.94	1.82		ug/L		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	111		70 - 130

Lab Sample ID: MRL 380-144467/22-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0975	0.106		ug/L		108	50 - 150
2,4'-DDD	0.0975	0.0863	J	ug/L		89	50 - 150
2,4'-DDE	0.0975	0.0965	J	ug/L		99	50 - 150
2,4'-DDT	0.0975	0.109		ug/L		112	50 - 150
2,4-Dinitrotoluene	0.0975	0.102		ug/L		105	50 - 150
2,6-Dinitrotoluene	0.0975	0.120		ug/L		123	50 - 150
2-Methylnaphthalene	0.0975	0.103		ug/L		106	50 - 150
4,4'-DDD	0.0975	0.119		ug/L		123	50 - 150
4,4'-DDE	0.0975	0.0894	J	ug/L		92	50 - 150
4,4'-DDT	0.0975	0.120		ug/L		123	50 - 150
Acenaphthene	0.0975	0.0918	J	ug/L		94	50 - 150
Acenaphthylene	0.0975	0.0873	J	ug/L		90	50 - 150
Acetochlor	0.0975	0.115		ug/L		118	50 - 150
Alachlor	0.0487	0.0706		ug/L		145	50 - 150

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MRL 380-144467/22-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.0975	0.0982		ug/L		101	50 - 150
alpha-Chlordane	0.0244	0.0289	J	ug/L		118	50 - 150
Anthracene	0.0195	0.0192		ug/L		99	50 - 150
Atrazine	0.0487	0.0706		ug/L		145	50 - 150
Benz(a)anthracene	0.0487	0.0762	^3+	ug/L		156	50 - 150
Benzo[a]pyrene	0.0195	0.0287		ug/L		147	50 - 150
Benzo[b]fluoranthene	0.0195	0.0294	^3+	ug/L		151	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0714		ug/L		146	50 - 150
Benzo[k]fluoranthene	0.0195	0.0280		ug/L		143	50 - 150
beta-BHC	0.0975	0.106		ug/L		109	50 - 150
Bis(2-ethylhexyl) phthalate	0.585	0.687		ug/L		117	50 - 150
Bromacil	0.0975	0.131		ug/L		135	50 - 150
Butachlor	0.0487	0.0759	^3+	ug/L		156	50 - 150
Butylbenzylphthalate	0.487	0.609		ug/L		125	50 - 150
Chlorobenzilate	0.0975	0.128		ug/L		131	50 - 150
Chloroneb	0.0975	0.0982		ug/L		101	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0975	0.103		ug/L		105	50 - 150
Chlorpyrifos	0.0487	0.0650		ug/L		133	50 - 150
Chrysene	0.0195	0.0188	J	ug/L		97	50 - 150
delta-BHC	0.0975	0.101		ug/L		104	50 - 150
Di(2-ethylhexyl)adipate	0.585	0.764		ug/L		131	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0737	^3+	ug/L		151	50 - 150
Diclorvos (DDVP)	0.0487	0.0589		ug/L		121	50 - 150
Dieldrin	0.00975	0.0110		ug/L		113	50 - 150
Diethylphthalate	0.487	0.533		ug/L		109	50 - 150
Dimethylphthalate	0.487	0.518		ug/L		106	50 - 150
Di-n-butyl phthalate	0.487	0.493	J	ug/L		101	49 - 243
Di-n-octyl phthalate	0.0975	0.125		ug/L		128	50 - 150
Endosulfan I (Alpha)	0.0975	0.0905	J	ug/L		93	50 - 150
Endosulfan II (Beta)	0.0975	0.114		ug/L		117	50 - 150
Endosulfan sulfate	0.0975	0.115		ug/L		118	50 - 150
Endrin	0.00975	0.0130		ug/L		134	50 - 150
Endrin aldehyde	0.0975	0.124		ug/L		127	50 - 150
EPTC	0.0975	0.0984		ug/L		101	50 - 150
Fluoranthene	0.0975	0.103		ug/L		106	50 - 150
Fluorene	0.0487	0.0490		ug/L		101	50 - 150
gamma-Chlordane	0.0244	0.0269	J	ug/L		110	50 - 150
Heptachlor	0.00975	0.0121		ug/L		124	50 - 150
Heptachlor epoxide (isomer B)	0.00975	0.0129		ug/L		132	50 - 150
Hexachlorobenzene	0.0487	0.0446	J	ug/L		91	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0625		ug/L		128	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0789	^3+	ug/L		162	50 - 150
Isophorone	0.0975	0.123		ug/L		126	50 - 150
Lindane	0.00975	0.0113		ug/L		116	50 - 150
Malathion	0.0975	0.120		ug/L		123	50 - 150
Methoxychlor	0.0487	0.0803	^3+	ug/L		165	50 - 150
Metolachlor	0.0487	0.0652		ug/L		134	50 - 150
Molinate	0.0975	0.105		ug/L		107	50 - 150
Naphthalene	0.0975	0.0994		ug/L		102	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MRL 380-144467/22-A
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Parathion	0.0975	0.0998		ug/L		102	50 - 150
Pendimethalin (Penoxaline)	0.0975	0.0954	J	ug/L		98	50 - 150
Phenanthrene	0.0390	0.0419		ug/L		107	50 - 150
Propachlor	0.0487	0.0535		ug/L		110	50 - 150
Pyrene	0.0487	0.0643		ug/L		132	50 - 150
Simazine	0.0487	0.0701		ug/L		144	50 - 150
Terbacil	0.0975	0.150	^3+	ug/L		154	50 - 150
Terbutylazine	0.0975	0.109		ug/L		112	50 - 150
Thiobencarb	0.0975	0.115		ug/L		118	50 - 150
trans-Nonachlor	0.0244	0.0292	J	ug/L		120	50 - 150
Trifluralin	0.0975	0.100		ug/L		103	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	88		70 - 130
Triphenylphosphate	105		70 - 130

Lab Sample ID: 380-142616-B-1-A MS
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		2.00	2.01		ug/L		101	70 - 130
2,4'-DDD	<0.098		2.00	2.18		ug/L		109	70 - 130
2,4'-DDE	<0.098		2.00	2.06		ug/L		103	70 - 130
2,4'-DDT	<0.098		2.00	1.88		ug/L		94	70 - 130
2,4-Dinitrotoluene	<0.098		2.00	2.05		ug/L		103	70 - 130
2,6-Dinitrotoluene	<0.098		2.00	1.99		ug/L		100	70 - 130
2-Methylnaphthalene	<0.098		2.00	2.04		ug/L		102	70 - 130
4,4'-DDD	<0.098		2.00	1.99		ug/L		100	70 - 130
4,4'-DDE	<0.098		2.00	1.89		ug/L		95	70 - 130
4,4'-DDT	<0.098		2.00	1.93		ug/L		97	70 - 130
Acenaphthene	<0.098		2.00	2.02		ug/L		101	70 - 130
Acenaphthylene	<0.098		2.00	2.09		ug/L		105	70 - 130
Acetochlor	<0.098		2.00	2.29		ug/L		115	70 - 130
Alachlor	<0.049		2.00	2.02		ug/L		101	70 - 130
alpha-BHC	<0.098		2.00	2.10		ug/L		105	70 - 130
alpha-Chlordane	<0.049		2.00	1.96		ug/L		98	70 - 130
Anthracene	<0.020		2.00	1.91		ug/L		96	70 - 130
Atrazine	<0.049		2.00	2.09		ug/L		102	70 - 130
Benz(a)anthracene	<0.049	^3+	2.00	1.98		ug/L		99	70 - 130
Benzo[a]pyrene	<0.020		2.00	2.16		ug/L		108	70 - 130
Benzo[b]fluoranthene	<0.020	^3+	2.00	2.39		ug/L		120	70 - 130
Benzo[g,h,i]perylene	<0.049		2.00	1.99		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.020		2.00	2.18		ug/L		109	70 - 130
beta-BHC	<0.098		2.00	2.19		ug/L		110	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		2.00	1.91		ug/L		96	70 - 130
Bromacil	<0.098		2.00	2.25		ug/L		113	70 - 130

QC Sample Results

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

Job ID: 380-142743-1
 SDG: Weekly

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

Lab Sample ID: 380-142616-B-1-A MS
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Butachlor	<0.049	^3+	2.00	2.34		ug/L		117	70 - 130
Butylbenzylphthalate	<0.49		2.00	2.32		ug/L		116	70 - 130
Chlorobenzilate	<0.098		2.00	2.26		ug/L		113	70 - 130
Chloroneb	<0.098		2.00	2.11		ug/L		106	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		2.00	2.01		ug/L		101	70 - 130
Chlorpyrifos	<0.049		2.00	2.03		ug/L		102	70 - 130
Chrysene	<0.020		2.00	2.19		ug/L		110	70 - 130
delta-BHC	<0.098		2.00	2.14		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	<0.59		2.00	2.19		ug/L		110	70 - 130
Dibenz(a,h)anthracene	<0.049	^3+	2.00	1.96		ug/L		98	70 - 130
Diclorvos (DDVP)	<0.049		2.00	2.29		ug/L		115	70 - 130
Dieldrin	<0.0098		2.00	2.11		ug/L		106	70 - 130
Diethylphthalate	<0.49		2.00	2.15		ug/L		108	70 - 130
Dimethylphthalate	<0.49		2.00	2.12		ug/L		106	70 - 130
Di-n-butyl phthalate	<0.98		3.99	4.72		ug/L		118	70 - 130
Di-n-octyl phthalate	<0.098		2.00	1.73		ug/L		87	70 - 130
Endosulfan I (Alpha)	<0.098		2.00	2.12		ug/L		106	70 - 130
Endosulfan II (Beta)	<0.098		2.00	2.17		ug/L		109	70 - 130
Endosulfan sulfate	<0.098		2.00	2.02		ug/L		101	70 - 130
Endrin	<0.0098		2.00	2.25		ug/L		113	70 - 130
Endrin aldehyde	<0.098		2.00	1.81		ug/L		91	60 - 130
EPTC	<0.098		2.00	2.24		ug/L		112	70 - 130
Fluoranthene	<0.098		2.00	2.12		ug/L		106	70 - 130
Fluorene	<0.049		2.00	2.10		ug/L		105	70 - 130
gamma-Chlordane	<0.049		2.00	1.93		ug/L		97	70 - 130
Heptachlor	<0.0098		2.00	2.08		ug/L		104	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		2.00	2.06		ug/L		103	70 - 130
Hexachlorobenzene	<0.049		2.00	1.93		ug/L		97	70 - 130
Hexachlorocyclopentadiene	<0.049		2.00	2.07		ug/L		104	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049	^3+	2.00	2.22		ug/L		111	70 - 130
Isophorone	<0.098		2.00	2.19		ug/L		110	70 - 130
Lindane	<0.0098		2.00	2.13		ug/L		107	70 - 130
Malathion	<0.098		2.00	2.09		ug/L		105	70 - 130
Methoxychlor	<0.049	^3+	2.00	2.33		ug/L		117	70 - 130
Metolachlor	<0.049		2.00	2.15		ug/L		108	70 - 130
Molinate	<0.098		2.00	2.27		ug/L		114	70 - 130
Naphthalene	<0.098		2.00	1.96		ug/L		98	70 - 130
Parathion	<0.098		2.00	2.27		ug/L		114	70 - 130
Pendimethalin (Penoxaline)	<0.098		2.00	2.14		ug/L		107	70 - 130
Phenanthrene	<0.039		2.00	1.97		ug/L		99	70 - 130
Propachlor	<0.049		2.00	2.36		ug/L		118	70 - 130
Pyrene	<0.049		2.00	2.10		ug/L		105	70 - 130
Simazine	<0.049		2.00	2.01		ug/L		101	70 - 130
Terbacil	<0.098	^3+	2.00	2.37		ug/L		119	70 - 130
Terbutylazine	<0.098		2.00	2.06		ug/L		103	70 - 130
Thiobencarb	<0.098		2.00	2.16		ug/L		108	70 - 130
trans-Nonachlor	<0.049		2.00	1.95		ug/L		98	70 - 130
Trifluralin	<0.098		2.00	1.88		ug/L		94	70 - 130

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: 380-142616-B-1-A MS
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 144467

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	100		70 - 130
Triphenylphosphate	104		70 - 130

Lab Sample ID: 380-142560-B-1-A DU
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	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
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		<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	^3+	<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020	^3+	<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	^3+	<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	^3+	<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

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: 380-142560-B-1-A DU
Matrix: Water
Analysis Batch: 144600

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 144467

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
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
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	^3+	<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	^3+	<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	^3+	<0.098		ug/L		NC	20
Terbutylazine	<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	DU DU		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	105		70 - 130

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MB 570-551286/1-A
Matrix: Water
Analysis Batch: 555741

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551286

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>MB MB Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>

<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	<i>90</i>		<i>33 - 139</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>74</i>		<i>33 - 126</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>47</i>		<i>12 - 120</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>80</i>		<i>36 - 120</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>27</i>		<i>10 - 120</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>90</i>		<i>47 - 131</i>	<i>03/29/25 14:41</i>	<i>04/09/25 21:17</i>	<i>1</i>

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

Lab Sample ID: MB 570-551286/1-A
Matrix: Water
Analysis Batch: 555208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 551286

<i>Analyte</i>	<i>Result</i>	<i>MB MB Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>2-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Acenaphthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Acenaphthylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Benzo[a]anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Benzo[a]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Benzo[b]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Benzo[g,h,i]perylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Benzo[k]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Chrysene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Dibenz(a,h)anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Fluorene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Indeno[1,2,3-cd]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Naphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Phenanthrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>

<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	<i>70</i>		<i>28 - 127</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>71</i>		<i>31 - 120</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>38</i>		<i>17 - 120</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>70</i>		<i>27 - 120</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>22</i>		<i>10 - 120</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>81</i>		<i>45 - 120</i>	<i>03/29/25 14:41</i>	<i>04/08/25 15:26</i>	<i>1</i>

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: LCS 570-551286/2-A
Matrix: Water
Analysis Batch: 555208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 551286

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.3		ug/L		72	47 - 120
2-Methylnaphthalene	20.0	16.4		ug/L		82	43 - 120
Acenaphthene	20.0	16.8		ug/L		84	60 - 132
Acenaphthylene	20.0	16.9		ug/L		84	54 - 126
Anthracene	20.0	17.6		ug/L		88	43 - 120
Benzo[a]anthracene	20.0	18.3		ug/L		91	42 - 133
Benzo[a]pyrene	20.0	17.3		ug/L		86	32 - 148
Benzo[b]fluoranthene	20.0	18.0		ug/L		90	42 - 140
Benzo[g,h,i]perylene	20.0	16.7		ug/L		84	1 - 195
Benzo[k]fluoranthene	20.0	17.1		ug/L		85	25 - 146
Chrysene	20.0	17.3		ug/L		86	44 - 140
Dibenz(a,h)anthracene	20.0	18.0		ug/L		90	1 - 200
Fluoranthene	20.0	17.7		ug/L		89	43 - 121
Fluorene	20.0	17.4		ug/L		87	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.7		ug/L		88	1 - 151
Naphthalene	20.0	14.0		ug/L		70	36 - 120
Phenanthrene	20.0	17.0		ug/L		85	65 - 120
Pyrene	20.0	18.4		ug/L		92	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	86		28 - 127
2-Fluorobiphenyl (Surr)	92		31 - 120
2-Fluorophenol (Surr)	52		17 - 120
Nitrobenzene-d5 (Surr)	77		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	98		45 - 120

Lab Sample ID: LCSD 570-551286/3-A
Matrix: Water
Analysis Batch: 555208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551286

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	14.3		ug/L		71	47 - 120	0	20
2-Methylnaphthalene	20.0	16.7		ug/L		84	43 - 120	2	20
Acenaphthene	20.0	16.6		ug/L		83	60 - 132	1	29
Acenaphthylene	20.0	16.3		ug/L		82	54 - 126	3	45
Anthracene	20.0	17.1		ug/L		85	43 - 120	3	40
Benzo[a]anthracene	20.0	17.4		ug/L		87	42 - 133	5	32
Benzo[a]pyrene	20.0	17.8		ug/L		89	32 - 148	3	43
Benzo[b]fluoranthene	20.0	18.1		ug/L		90	42 - 140	0	43
Benzo[g,h,i]perylene	20.0	17.1		ug/L		85	1 - 195	2	61
Benzo[k]fluoranthene	20.0	17.2		ug/L		86	25 - 146	1	38
Chrysene	20.0	16.6		ug/L		83	44 - 140	4	53
Dibenz(a,h)anthracene	20.0	18.1		ug/L		91	1 - 200	1	75
Fluoranthene	20.0	16.9		ug/L		85	43 - 121	5	40
Fluorene	20.0	16.7		ug/L		83	70 - 120	4	23
Indeno[1,2,3-cd]pyrene	20.0	18.3		ug/L		92	1 - 151	3	60
Naphthalene	20.0	14.3		ug/L		71	36 - 120	2	39

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: LCSD 570-551286/3-A
Matrix: Water
Analysis Batch: 555208

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 551286

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	16.8		ug/L		84	65 - 120	1	24
Pyrene	20.0	17.0		ug/L		85	70 - 120	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	82		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	74		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	90		45 - 120

Lab Sample ID: 380-142747-A-1-B MS
Matrix: Water
Analysis Batch: 555208

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 551286

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.4	15.0		ug/L		78	36 - 120
2-Methylnaphthalene	<0.19		19.4	17.5		ug/L		90	32 - 124
Acenaphthene	<0.19		19.4	15.7		ug/L		81	47 - 145
Acenaphthylene	<0.19		19.4	15.0		ug/L		78	33 - 145
Anthracene	<0.19		19.4	15.1		ug/L		78	27 - 133
Benzo[a]anthracene	<0.19		19.4	16.0		ug/L		83	33 - 143
Benzo[a]pyrene	<0.19		19.4	15.0		ug/L		78	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	16.4		ug/L		85	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	16.0		ug/L		83	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	16.0		ug/L		82	11 - 162
Chrysene	<0.19		19.4	16.1		ug/L		83	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	17.0		ug/L		88	1 - 227
Fluoranthene	<0.19		19.4	16.3		ug/L		84	26 - 137
Fluorene	<0.19		19.4	15.8		ug/L		81	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	16.9		ug/L		87	1 - 171
Naphthalene	<0.19		19.4	15.1		ug/L		78	21 - 133
Phenanthrene	<0.19		19.4	15.7		ug/L		81	54 - 120
Pyrene	<0.19		19.4	16.8		ug/L		87	52 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol (Surr)	80		28 - 127
2-Fluorobiphenyl (Surr)	85		31 - 120
2-Fluorophenol (Surr)	45		17 - 120
Nitrobenzene-d5 (Surr)	80		27 - 120
Phenol-d6 (Surr)	29		10 - 120
p-Terphenyl-d14 (Surr)	88		45 - 120

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: 380-142747-A-1-C MSD

Matrix: Water

Analysis Batch: 555208

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 551286

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
1-Methylnaphthalene	<0.19		19.3	15.8		ug/L		82	36 - 120	5	30
2-Methylnaphthalene	<0.19		19.3	18.4		ug/L		96	32 - 124	5	30
Acenaphthene	<0.19		19.3	16.4		ug/L		85	47 - 145	4	48
Acenaphthylene	<0.19		19.3	15.3		ug/L		79	33 - 145	2	74
Anthracene	<0.19		19.3	15.8		ug/L		82	27 - 133	5	66
Benzo[a]anthracene	<0.19		19.3	16.6		ug/L		86	33 - 143	4	53
Benzo[a]pyrene	<0.19		19.3	15.9		ug/L		82	17 - 163	5	72
Benzo[b]fluoranthene	<0.19		19.3	17.5		ug/L		91	24 - 159	6	71
Benzo[g,h,i]perylene	<0.19		19.3	16.7		ug/L		87	1 - 219	4	97
Benzo[k]fluoranthene	<0.19		19.3	16.4		ug/L		85	11 - 162	3	63
Chrysene	<0.19		19.3	16.5		ug/L		85	17 - 168	3	87
Dibenz(a,h)anthracene	<0.19		19.3	17.0		ug/L		88	1 - 227	0	126
Fluoranthene	<0.19		19.3	17.9		ug/L		93	26 - 137	9	66
Fluorene	<0.19		19.3	16.3		ug/L		85	59 - 121	3	38
Indeno[1,2,3-cd]pyrene	<0.19		19.3	17.1		ug/L		88	1 - 171	1	99
Naphthalene	<0.19		19.3	15.8		ug/L		82	21 - 133	5	65
Phenanthrene	<0.19		19.3	17.0		ug/L		88	54 - 120	8	39
Pyrene	<0.19		19.3	16.6		ug/L		86	52 - 120	1	49

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2,4,6-Tribromophenol (Surr)	84		28 - 127
2-Fluorobiphenyl (Surr)	84		31 - 120
2-Fluorophenol (Surr)	43		17 - 120
Nitrobenzene-d5 (Surr)	82		27 - 120
Phenol-d6 (Surr)	27		10 - 120
p-Terphenyl-d14 (Surr)	88		45 - 120

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

Lab Sample ID: MB 570-552661/6

Matrix: Water

Analysis Batch: 552661

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			04/02/25 14:50	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		38 - 134		04/02/25 14:50	1

Lab Sample ID: LCS 570-552661/4

Matrix: Water

Analysis Batch: 552661

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Gasoline Range Organics (C4-C13)	400	361		ug/L		90	78 - 120

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: LCS 570-552661/4
Matrix: Water
Analysis Batch: 552661

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

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

Lab Sample ID: LCSD 570-552661/5
Matrix: Water
Analysis Batch: 552661

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	346		ug/L		86	78 - 120	4	10

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

Lab Sample ID: MRL 570-552661/3
Matrix: Water
Analysis Batch: 552661

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	12.1		ug/L		121	50 - 150

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

Lab Sample ID: 380-142747-C-1 MS
Matrix: Water
Analysis Batch: 552661

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	F1	2000	368	F1	ug/L		18	68 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		38 - 134

Lab Sample ID: 380-142747-C-1 MSD
Matrix: Water
Analysis Batch: 552661

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	F1	2000	376	F1	ug/L		19	68 - 122	2	18

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		38 - 134

QC Sample Results

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

Job ID: 380-142743-1
SDG: Weekly

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

Lab Sample ID: MB 570-552140/1-A
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 552140

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/01/25 11:10	04/07/25 13:46	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/01/25 11:10	04/07/25 13:46	1
C8-C18	<25		25	ug/L		04/01/25 11:10	04/07/25 13:46	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
<i>n-Octacosane (Surr)</i>	112		60 - 130			04/01/25 11:10	04/07/25 13:46	1

Lab Sample ID: LCS 570-552140/2-A
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552140

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
C10-C28	1600	1510		ug/L		94	56 - 127		
Surrogate	LCS LCS		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	107		60 - 130						

Lab Sample ID: LCSD 570-552140/3-A
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 552140

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
C10-C28	1600	1460		ug/L		91	56 - 127	3	23
Surrogate	LCSD LCSD		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	108		60 - 130						

Lab Sample ID: MRL 570-552140/4-A
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 552140

Analyte	Spike Added	MRL MRL		Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
C10-C28	0.0200	0.0303	^3+	mg/L		152	50 - 150		
Surrogate	MRL MRL		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	110		60 - 130						

Lab Sample ID: 380-142747-B-1-A MS
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 552140

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	RPD	Limit
				Result	Qualifier						
C10-C28	<26	^3+	1640	1480		ug/L		90	70 - 130		
Surrogate	MS MS		Limits					%Rec			
	%Recovery	Qualifier									
<i>n-Octacosane (Surr)</i>	106		60 - 130								

QC Sample Results

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

Job ID: 380-142743-1
 SDG: Weekly

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

Lab Sample ID: 380-142747-B-1-B MSD
Matrix: Water
Analysis Batch: 554496

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 552140

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	^3+	1680	1490		ug/L		89	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
<i>n</i> -Octacosane (Surr)	104		60 - 130								

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QC Association Summary

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

Job ID: 380-142743-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 144467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	
MB 380-144467/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-144467/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-144467/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-142616-B-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-142560-B-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 144600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	525.2	144467
MB 380-144467/21-A	Method Blank	Total/NA	Water	525.2	144467
LCS 380-144467/23-A	Lab Control Sample	Total/NA	Water	525.2	144467
MRL 380-144467/22-A	Lab Control Sample	Total/NA	Water	525.2	144467
380-142616-B-1-A MS	Matrix Spike	Total/NA	Water	525.2	144467
380-142560-B-1-A DU	Duplicate	Total/NA	Water	525.2	144467

Prep Batch: 551286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	
MB 570-551286/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-551286/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-551286/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-142747-A-1-B MS	Matrix Spike	Total/NA	Water	625.1	
380-142747-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 555208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1 SIM	551286
MB 570-551286/1-A	Method Blank	Total/NA	Water	625.1 SIM	551286
LCS 570-551286/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	551286
LCSD 570-551286/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	551286
380-142747-A-1-B MS	Matrix Spike	Total/NA	Water	625.1 SIM	551286
380-142747-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	551286

Analysis Batch: 555741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	625.1	551286
MB 570-551286/1-A	Method Blank	Total/NA	Water	625.1	551286

GC VOA

Analysis Batch: 552661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B GRO LL	
380-142743-2	TB: Halawa Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-552661/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-552661/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-552661/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-552661/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-142747-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-142747-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: 380-142743-1
 SDG: Weekly

GC Semi VOA

Prep Batch: 552140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	3510C	
MB 570-552140/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-552140/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-552140/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-552140/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-142747-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-142747-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 554496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-142743-1	Halawa Shaft Viewing Pool	Total/NA	Drinking Water	8015B	552140
MB 570-552140/1-A	Method Blank	Total/NA	Water	8015B	552140
LCS 570-552140/2-A	Lab Control Sample	Total/NA	Water	8015B	552140
LCSD 570-552140/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	552140
MRL 570-552140/4-A	Lab Control Sample	Total/NA	Water	8015B	552140
380-142747-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	552140
380-142747-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	552140



Lab Chronicle

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

Job ID: 380-142743-1
SDG: Weekly

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-1

Date Collected: 03/25/25 10:00

Matrix: Drinking Water

Date Received: 03/28/25 10:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			144467	KRD3	EA POM	03/30/25 11:18
Total/NA	Analysis	525.2		1	144600	UPAC	EA POM	03/31/25 15:56
Total/NA	Prep	625.1			551286	UD4J	EET CAL 4	03/29/25 14:41
Total/NA	Analysis	625.1		1	555741	AX7Z	EET CAL 4	04/09/25 21:40
Total/NA	Prep	625.1			551286	UD4J	EET CAL 4	03/29/25 14:41
Total/NA	Analysis	625.1 SIM		1	555208	PQS1	EET CAL 4	04/08/25 17:40
Total/NA	Analysis	8015B GRO LL		1	552661	A9VE	EET CAL 4	04/03/25 00:37
Total/NA	Prep	3510C			552140	TVD6	EET CAL 4	04/01/25 11:10
Total/NA	Analysis	8015B		1	554496	E5RH	EET CAL 4	04/07/25 15:57

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-142743-2

Date Collected: 03/25/25 10:00

Matrix: Water

Date Received: 03/28/25 10:06

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	552661	A9VE	EET CAL 4	04/02/25 21:19

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: 380-142743-1
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 *
<p>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.</p>			
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

* 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: 380-142743-1
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

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Method Summary

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

Job ID: 380-142743-1
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: 380-142743-1
SDG: Weekly

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-142743-1	Halawa Shaft Viewing Pool	Drinking Water	03/25/25 10:00	03/28/25 10:06
380-142743-2	TB: Halawa Shaft Viewing Pool	Water	03/25/25 10:00	03/28/25 10:06

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Eurofins Eaton Analytical Pomona

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

Chain of Custody Record



eurofins

Loc: 380
142743

Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Arada, Rachelle	Carrier Tracking No(s): N/A	COC No: 380-202563.1
Client Contact: Shipping/Receiving		Phone: N/A	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,			Accreditations Required (See note): State - Hawaii		Job #: 380-142743-1
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 4/10/2025	Analysis Requested		
City: Tustin		TAT Requested (days): N/A			
State, Zip: CA, 92780		PO #: N/A	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 801BB_DRO_LL_CS3510C_LL_HNL Ranges: C10-C24/C24-C36/C8-C18 625-1_SIM/625_Prep (MOD) Extended PAH List 625-1/625_Prep (MOD) Tentatively Identified Compounds (Hold) 801BB_GRO_LLJ5939C (MOD) GRO		
Phone: 714-895-5494(Tel)		WO #: N/A			
Email: N/A		Project #: 38001111	Total Number of Containers Other: N/A		
Project Name: RED-HILL		SSOW#: N/A			
Site: Honolulu BWS Sites					Special Instructions/Note:
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=Other, BT=Tissue, AA=Air)	Preservation Code:
HALAWA SHAFT (331-241-TP401) (380-142743-1)	3/25/25	10:00 Hawaiian	G	Water	X X X X
TB: HALAWA SHAFT (331-241-TP401) (380-142743-2)	3/25/25	10:00 Hawaiian	G	Water	X
					MRLs are needed. Confirm any hits >RL
					MRLs are needed.



380-142743 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:
Primary Deliverable Rank: 2	

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 3/28/25 14:00	Company: <i>[Signature]</i>	Received by: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: 3/28/25 14:55	Company: <i>[Signature]</i>	Received by: <i>[Signature]</i>
Relinquished by:	Date/Time:	Company:	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 09/11 SC14
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Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-142743-1

SDG Number: Weekly

Login Number: 142743

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-142743-1

SDG Number: Weekly

Login Number: 142743

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 03/28/25 07:02 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

