

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly

JOB NUMBER

380-133865-1

Eurofins Eaton Analytical Pomona

Job Notes

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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: 380-133865-1
SDG: Weekly

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate 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: 380-133865-1

Job ID: 380-133865-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-133865-1

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 2/5/2025 10:26 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 0.7°C.

GC/MS Semi VOA

Method 625.1_SIM: The laboratory control sample (LCS) and laboratory control sample (LCSD) for preparation batch 570-531324 and analytical batch 570-531865 recovered outside control limits for the following analytes: 1-Methylnaphthalene, Acenaphthene, Acenaphthylene and Fluorene. The LCS and LCSD was re-prep and re-ran. The compounds still failed low. The samples HT are expired therefore, no re-extraction. Data excluded due to this QC failure.

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

Gasoline Range Organics

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 570-531752 and analytical batch 570-532732 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.

Method 8015B_DRO_LL_CS: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-531752 and analytical batch 570-532732 recovered outside control limits for the following analytes: C10-C28. Laboratory control sample / laboratory control sample duplicate (LCS/LCSD) percent recovery is in control for affected analytes.

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

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-133865-1
SDG: Weekly

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-133865-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.041		0.0098	ug/L	1		525.2	Total/NA

Client Sample ID: TB: Ka'amilo Wells

Lab Sample ID: 380-133865-2

No Detections.

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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: 380-133865-1
SDG: Weekly

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-133865-1

Date Collected: 02/03/25 11:37

Matrix: Water

Date Received: 02/05/25 10:26

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		02/07/25 14:02	02/09/25 15:52	1
2,4'-DDD	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
2,4'-DDE	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
2,4'-DDT	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
2-Methylnaphthalene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
4,4'-DDD	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
4,4'-DDE	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
4,4'-DDT	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Acenaphthene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Acenaphthylene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Acetochlor	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Alachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
alpha-BHC	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
alpha-Chlordane	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Anthracene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 15:52	1
Atrazine	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Benz(a)anthracene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Benzo[a]pyrene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 15:52	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 15:52	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 15:52	1
beta-BHC	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		02/07/25 14:02	02/09/25 15:52	1
Bromacil	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Butachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Butylbenzylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 15:52	1
Chlorobenzilate	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Chloroneb	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Chlorpyrifos	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Chrysene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 15:52	1
delta-BHC	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		02/07/25 14:02	02/09/25 15:52	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Dieldrin	0.041		0.0098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Diethylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 15:52	1
Dimethylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 15:52	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		02/07/25 14:02	02/09/25 15:52	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Endosulfan sulfate	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Endrin	<0.0098		0.0098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Endrin aldehyde	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
EPTC	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Fluoranthene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1

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Client Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-133865-1

Date Collected: 02/03/25 11:37

Matrix: Water

Date Received: 02/05/25 10:26

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		02/07/25 14:02	02/09/25 15:52	1
gamma-Chlordane	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Heptachlor	<0.0098		0.0098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Hexachlorobenzene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Isophorone	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Lindane	<0.0098		0.0098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Malathion	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Methoxychlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Metolachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Molinate	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Naphthalene	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Parathion	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Phenanthrene	<0.039		0.039	ug/L		02/07/25 14:02	02/09/25 15:52	1
Propachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Pyrene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Simazine	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Terbacil	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Terbutylazine	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Thiobencarb	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		02/07/25 14:02	02/09/25 15:52	1
trans-Nonachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 15:52	1
Trifluralin	<0.098		0.098	ug/L		02/07/25 14:02	02/09/25 15:52	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	02/07/25 14:02	02/09/25 15:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	02/07/25 14:02	02/09/25 15:52	1
Perylene-d12	96		70 - 130	02/07/25 14:02	02/09/25 15:52	1
Triphenylphosphate	104		70 - 130	02/07/25 14:02	02/09/25 15:52	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			02/13/25 16:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		02/13/25 16:10	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)	<26		26	ug/L		02/09/25 14:11	02/22/25 02:02	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		02/09/25 14:11	02/22/25 02:02	1
C8-C18	<26		26	ug/L		02/09/25 14:11	02/22/25 02:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	78		60 - 130	02/09/25 14:11	02/22/25 02:02	1

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Client Sample Results

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

Job ID: 380-133865-1
 SDG: Weekly

Client Sample ID: TB: Ka'amilo Wells

Lab Sample ID: 380-133865-2

Date Collected: 02/03/25 11:37

Matrix: Water

Date Received: 02/05/25 10:26

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			02/13/25 12:35	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		38 - 134				02/13/25 12:35	1

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Action Limit Summary

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

Job ID: 380-133865-1
SDG: Weekly

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-133865-1

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

Surrogate Summary

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

Job ID: 380-133865-1
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)
380-133797-B-1-B MS	Matrix Spike	102	96	119
380-133797-B-1-C MSD	Matrix Spike Duplicate	100	98	118
380-133797-B-1-D DU	Duplicate	105	94	120
380-133865-1	Ka'amilo Wells	98	96	104
LCS 380-133645/23-A	Lab Control Sample	98	98	106
MB 380-133645/21-A	Method Blank	105	103	114
MRL 380-133645/22-A	Lab Control Sample	97	92	97

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-133865-1	Ka'amilo Wells	89
380-133865-2	TB: Ka'amilo Wells	80
380-133869-B-1 MS	Matrix Spike	94
380-133869-B-1 MSD	Matrix Spike Duplicate	95
LCS 570-533375/4	Lab Control Sample	98
LCSD 570-533375/5	Lab Control Sample Dup	97
MB 570-533375/6	Method Blank	91
MRL 570-533375/3	Lab Control Sample	94

Surrogate Legend
 BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN1 (60-130)
380-133865-1	Ka'amilo Wells	78
380-133869-C-1-A MS	Matrix Spike	99
380-133869-C-1-B MSD	Matrix Spike Duplicate	109
LCS 570-531752/2-A	Lab Control Sample	90
LCSD 570-531752/3-A	Lab Control Sample Dup	102
MB 570-531752/1-A	Method Blank	100
MRL 570-531752/4-A	Lab Control Sample	83

Surrogate Legend
 OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-133865-1
 SDG: Weekly

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

Lab Sample ID: MB 380-133645/21-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133645

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2,4'-DDD	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2,4'-DDE	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2,4'-DDT	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
2-Methylnaphthalene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
4,4'-DDD	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
4,4'-DDE	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
4,4'-DDT	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Acenaphthene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Acenaphthylene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Acetochlor	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Alachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
alpha-BHC	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
alpha-Chlordane	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Anthracene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 14:10	1
Atrazine	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Benz(a)anthracene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Benzo[a]pyrene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 14:10	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 14:10	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 14:10	1
beta-BHC	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		02/07/25 14:02	02/09/25 14:10	1
Bromacil	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Butachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Butylbenzylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 14:10	1
Chlorobenzilate	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Chloroneb	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Chlorpyrifos	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Chrysene	<0.020		0.020	ug/L		02/07/25 14:02	02/09/25 14:10	1
delta-BHC	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		02/07/25 14:02	02/09/25 14:10	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Dieldrin	<0.0099		0.0099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Diethylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 14:10	1
Dimethylphthalate	<0.49		0.49	ug/L		02/07/25 14:02	02/09/25 14:10	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		02/07/25 14:02	02/09/25 14:10	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Endosulfan sulfate	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Endrin	<0.0099		0.0099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Endrin aldehyde	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
EPTC	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: MB 380-133645/21-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 133645

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Fluorene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
gamma-Chlordane	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Heptachlor	<0.0099		0.0099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Hexachlorobenzene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Isophorone	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Lindane	<0.0099		0.0099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Malathion	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Methoxychlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Metolachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Molinate	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Naphthalene	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Parathion	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Phenanthrene	<0.039		0.039	ug/L		02/07/25 14:02	02/09/25 14:10	1
Propachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Pyrene	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Simazine	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Terbacil	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Terbutylazine	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Thiobencarb	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		02/07/25 14:02	02/09/25 14:10	1
trans-Nonachlor	<0.049		0.049	ug/L		02/07/25 14:02	02/09/25 14:10	1
Trifluralin	<0.099		0.099	ug/L		02/07/25 14:02	02/09/25 14:10	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Decane	2.07	T J N	ug/L		2.69	124-18-5	02/07/25 14:02	02/09/25 14:10	1
Cyclohexasiloxane, dodecamethyl-	0.560	T J N	ug/L		3.77	540-97-6	02/07/25 14:02	02/09/25 14:10	1
9-Octadecenamamide, (Z)-	1.87	T J N	ug/L		7.71	301-02-0	02/07/25 14:02	02/09/25 14:10	1
Unknown	0.800	T J	ug/L		9.40	N/A	02/07/25 14:02	02/09/25 14:10	1
13-Docosenamamide, (Z)-	0.589	T J N	ug/L		10.18	112-84-5	02/07/25 14:02	02/09/25 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	105		70 - 130	02/07/25 14:02	02/09/25 14:10	1
Perylene-d12	103		70 - 130	02/07/25 14:02	02/09/25 14:10	1
Triphenylphosphate	114		70 - 130	02/07/25 14:02	02/09/25 14:10	1

Lab Sample ID: LCS 380-133645/23-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.98	2.13		ug/L		107	70 - 130
2,4'-DDD	1.98	2.18		ug/L		110	70 - 130
2,4'-DDE	1.98	2.11		ug/L		107	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: LCS 380-133645/23-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDT	1.98	2.18		ug/L		110	70 - 130
2,4-Dinitrotoluene	1.98	2.10		ug/L		106	70 - 130
2,6-Dinitrotoluene	1.98	2.04		ug/L		103	70 - 130
2-Methylnaphthalene	1.98	1.95		ug/L		99	70 - 130
4,4'-DDD	1.98	2.28		ug/L		115	70 - 130
4,4'-DDE	1.98	2.10		ug/L		106	70 - 130
4,4'-DDT	1.98	2.13		ug/L		108	70 - 130
Acenaphthene	1.98	1.95		ug/L		98	70 - 130
Acenaphthylene	1.98	2.11		ug/L		106	70 - 130
Acetochlor	1.98	2.27		ug/L		115	70 - 130
Alachlor	1.98	2.25		ug/L		114	70 - 130
alpha-BHC	1.98	2.09		ug/L		105	70 - 130
alpha-Chlordane	1.98	2.19		ug/L		111	70 - 130
Anthracene	1.98	2.02		ug/L		102	70 - 130
Atrazine	1.98	2.16		ug/L		109	70 - 130
Benz(a)anthracene	1.98	2.10		ug/L		106	70 - 130
Benzo[a]pyrene	1.98	2.12		ug/L		107	70 - 130
Benzo[b]fluoranthene	1.98	2.25		ug/L		114	70 - 130
Benzo[g,h,i]perylene	1.98	1.95		ug/L		99	70 - 130
Benzo[k]fluoranthene	1.98	2.22		ug/L		112	70 - 130
beta-BHC	1.98	2.26		ug/L		114	70 - 130
Bis(2-ethylhexyl) phthalate	1.98	2.07		ug/L		105	70 - 130
Bromacil	1.98	2.21		ug/L		112	70 - 130
Butachlor	1.98	2.40		ug/L		121	70 - 130
Butylbenzylphthalate	1.98	2.29		ug/L		116	70 - 130
Chlorobenzilate	1.98	2.07		ug/L		104	70 - 130
Chloroneb	1.98	2.05		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	1.98	2.17		ug/L		110	70 - 130
Chlorpyrifos	1.98	2.19		ug/L		111	70 - 130
Chrysene	1.98	1.99		ug/L		100	70 - 130
delta-BHC	1.98	2.11		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	1.98	2.08		ug/L		105	70 - 130
Dibenz(a,h)anthracene	1.98	1.99		ug/L		101	70 - 130
Diclorvos (DDVP)	1.98	2.12		ug/L		107	70 - 130
Dieldrin	1.98	2.16		ug/L		109	70 - 130
Diethylphthalate	1.98	2.26		ug/L		114	70 - 130
Dimethylphthalate	1.98	2.17		ug/L		110	70 - 130
Di-n-butyl phthalate	3.96	4.53		ug/L		115	70 - 130
Di-n-octyl phthalate	1.98	2.00		ug/L		101	70 - 130
Endosulfan I (Alpha)	1.98	2.09		ug/L		106	70 - 130
Endosulfan II (Beta)	1.98	2.07		ug/L		104	70 - 130
Endosulfan sulfate	1.98	2.16		ug/L		109	70 - 130
Endrin	1.98	2.11		ug/L		107	70 - 130
Endrin aldehyde	1.98	2.16		ug/L		109	60 - 130
EPTC	1.98	2.09		ug/L		106	70 - 130
Fluoranthene	1.98	2.20		ug/L		111	70 - 130
Fluorene	1.98	2.08		ug/L		105	70 - 130
gamma-Chlordane	1.98	2.15		ug/L		109	70 - 130
Heptachlor	1.98	2.15		ug/L		109	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: LCS 380-133645/23-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor epoxide (isomer B)	1.98	2.10		ug/L		106	70 - 130
Hexachlorobenzene	1.98	1.99		ug/L		100	70 - 130
Hexachlorocyclopentadiene	1.98	2.05		ug/L		104	70 - 130
Indeno[1,2,3-cd]pyrene	1.98	2.05		ug/L		104	70 - 130
Isophorone	1.98	2.01		ug/L		102	70 - 130
Lindane	1.98	2.17		ug/L		110	70 - 130
Malathion	1.98	2.33		ug/L		118	70 - 130
Methoxychlor	1.98	2.19		ug/L		111	70 - 130
Metolachlor	1.98	2.30		ug/L		116	70 - 130
Molinate	1.98	2.17		ug/L		110	70 - 130
Naphthalene	1.98	1.99		ug/L		101	70 - 130
Parathion	1.98	2.27		ug/L		115	70 - 130
Pendimethalin (Penoxaline)	1.98	2.19		ug/L		111	70 - 130
Phenanthrene	1.98	2.13		ug/L		107	70 - 130
Propachlor	1.98	2.31		ug/L		117	70 - 130
Pyrene	1.98	2.23		ug/L		113	70 - 130
Simazine	1.98	2.40		ug/L		122	70 - 130
Terbacil	1.98	2.40		ug/L		121	70 - 130
Terbutylazine	1.98	2.32		ug/L		117	70 - 130
Thiobencarb	1.98	2.26		ug/L		114	70 - 130
trans-Nonachlor	1.98	2.15		ug/L		109	70 - 130
Trifluralin	1.98	2.13		ug/L		108	70 - 130

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

Lab Sample ID: MRL 380-133645/22-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0990	0.110		ug/L		111	50 - 150
2,4'-DDD	0.0990	0.100		ug/L		101	50 - 150
2,4'-DDE	0.0990	0.108		ug/L		109	50 - 150
2,4'-DDT	0.0990	0.106		ug/L		107	50 - 150
2,4-Dinitrotoluene	0.0990	0.110		ug/L		111	50 - 150
2,6-Dinitrotoluene	0.0990	0.117		ug/L		118	50 - 150
2-Methylnaphthalene	0.0990	0.112		ug/L		113	50 - 150
4,4'-DDD	0.0990	0.118		ug/L		119	50 - 150
4,4'-DDE	0.0990	0.105		ug/L		106	50 - 150
4,4'-DDT	0.0990	0.126		ug/L		127	50 - 150
Acenaphthene	0.0990	0.104		ug/L		105	50 - 150
Acenaphthylene	0.0990	0.102		ug/L		103	50 - 150
Acetochlor	0.0990	0.127		ug/L		128	50 - 150
Alachlor	0.0495	0.0542		ug/L		110	50 - 150
alpha-BHC	0.0990	0.121		ug/L		122	50 - 150

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: MRL 380-133645/22-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
alpha-Chlordane	0.0247	<0.029		ug/L		105	50 - 150
Anthracene	0.0198	0.0238		ug/L		120	50 - 150
Atrazine	0.0495	0.0595		ug/L		120	50 - 150
Benz(a)anthracene	0.0495	0.0548		ug/L		111	50 - 150
Benzo[a]pyrene	0.0198	0.0267		ug/L		135	50 - 150
Benzo[b]fluoranthene	0.0198	0.0201		ug/L		102	50 - 150
Benzo[g,h,i]perylene	0.0495	0.0399	J	ug/L		81	50 - 150
Benzo[k]fluoranthene	0.0198	0.0179	J	ug/L		91	50 - 150
beta-BHC	0.0990	0.132		ug/L		134	50 - 150
Bis(2-ethylhexyl) phthalate	0.594	0.673		ug/L		113	50 - 150
Bromacil	0.0990	0.117		ug/L		119	50 - 150
Butachlor	0.0495	0.0569		ug/L		115	50 - 150
Butylbenzylphthalate	0.495	0.597		ug/L		121	50 - 150
Chlorobenzilate	0.0990	0.0917	J	ug/L		93	50 - 150
Chloroneb	0.0990	0.0934	J	ug/L		94	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0990	0.0977	J	ug/L		99	50 - 150
Chlorpyrifos	0.0495	0.0571		ug/L		115	50 - 150
Chrysene	0.0198	0.0239		ug/L		121	50 - 150
delta-BHC	0.0990	0.129		ug/L		130	50 - 150
Di(2-ethylhexyl)adipate	0.594	0.661		ug/L		111	50 - 150
Dibenz(a,h)anthracene	0.0495	0.0432	J	ug/L		87	50 - 150
Diclorvos (DDVP)	0.0495	0.0644		ug/L		130	50 - 150
Dieldrin	0.00990	0.0135		ug/L		136	50 - 150
Diethylphthalate	0.495	0.598		ug/L		121	50 - 150
Dimethylphthalate	0.495	0.584		ug/L		118	50 - 150
Di-n-butyl phthalate	0.495	0.607	J	ug/L		123	49 - 243
Di-n-octyl phthalate	0.0990	0.0956	J	ug/L		97	50 - 150
Endosulfan I (Alpha)	0.0990	0.114		ug/L		115	50 - 150
Endosulfan II (Beta)	0.0990	0.110		ug/L		111	50 - 150
Endosulfan sulfate	0.0990	0.113		ug/L		114	50 - 150
Endrin	0.00990	0.0132		ug/L		133	50 - 150
Endrin aldehyde	0.0990	0.114		ug/L		115	50 - 150
EPTC	0.0990	0.0988	J	ug/L		100	50 - 150
Fluoranthene	0.0990	0.108		ug/L		109	50 - 150
Fluorene	0.0495	0.0531		ug/L		107	50 - 150
gamma-Chlordane	0.0247	0.0243	J	ug/L		98	50 - 150
Heptachlor	0.00990	0.0132		ug/L		133	50 - 150
Heptachlor epoxide (isomer B)	0.00990	0.0137		ug/L		138	50 - 150
Hexachlorobenzene	0.0495	0.0490		ug/L		99	50 - 150
Hexachlorocyclopentadiene	0.0495	0.0474	J	ug/L		96	50 - 150
Indeno[1,2,3-cd]pyrene	0.0495	0.0497		ug/L		100	50 - 150
Isophorone	0.0990	0.125		ug/L		126	50 - 150
Lindane	0.00990	0.00935	J	ug/L		94	50 - 150
Malathion	0.0990	0.101		ug/L		102	50 - 150
Methoxychlor	0.0495	0.0586		ug/L		118	50 - 150
Metolachlor	0.0495	0.0603		ug/L		122	50 - 150
Molinate	0.0990	0.115		ug/L		116	50 - 150
Naphthalene	0.0990	0.108		ug/L		109	50 - 150
Parathion	0.0990	0.0939	J	ug/L		95	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: MRL 380-133645/22-A
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Pendimethalin (Penoxaline)	0.0990	0.0957	J	ug/L		97	50 - 150
Phenanthrene	0.0396	0.0396	J	ug/L		100	50 - 150
Propachlor	0.0495	0.0588		ug/L		119	50 - 150
Pyrene	0.0495	0.0531		ug/L		107	50 - 150
Simazine	0.0495	0.0606		ug/L		123	50 - 150
Terbacil	0.0990	0.105		ug/L		107	50 - 150
Terbutylazine	0.0990	0.111		ug/L		112	50 - 150
Thiobencarb	0.0990	0.107		ug/L		109	50 - 150
trans-Nonachlor	0.0247	<0.026		ug/L		95	50 - 150
Trifluralin	0.0990	0.105		ug/L		106	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	97		70 - 130

Lab Sample ID: 380-133797-B-1-B MS
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.95	2.21		ug/L		113	70 - 130
2,4'-DDD	<0.097		1.95	2.06		ug/L		105	70 - 130
2,4'-DDE	<0.097		1.95	1.78		ug/L		92	70 - 130
2,4'-DDT	<0.097		1.95	1.87		ug/L		96	70 - 130
2,4-Dinitrotoluene	<0.097		1.95	2.47		ug/L		127	70 - 130
2,6-Dinitrotoluene	<0.097	F1	1.95	3.64	F1	ug/L		187	70 - 130
2-Methylnaphthalene	<0.097		1.95	1.95		ug/L		100	70 - 130
4,4'-DDD	<0.097		1.95	2.19		ug/L		112	70 - 130
4,4'-DDE	<0.097		1.95	1.77		ug/L		91	70 - 130
4,4'-DDT	<0.097		1.95	1.85		ug/L		95	70 - 130
Acenaphthene	<0.097		1.95	1.91		ug/L		98	70 - 130
Acenaphthylene	<0.097		1.95	2.12		ug/L		109	70 - 130
Acetochlor	<0.097		1.95	2.48		ug/L		127	70 - 130
Alachlor	<0.048		1.95	2.52		ug/L		129	70 - 130
alpha-BHC	<0.097		1.95	2.17		ug/L		111	70 - 130
alpha-Chlordane	<0.048		1.95	1.98		ug/L		102	70 - 130
Anthracene	<0.019	F1	1.95	0.994	F1	ug/L		51	70 - 130
Atrazine	<0.048		1.95	2.18		ug/L		112	70 - 130
Benz(a)anthracene	<0.048		1.95	1.94		ug/L		100	70 - 130
Benzo[a]pyrene	<0.019		1.95	1.90		ug/L		98	70 - 130
Benzo[b]fluoranthene	<0.019		1.95	2.21		ug/L		114	70 - 130
Benzo[g,h,i]perylene	<0.048		1.95	1.77		ug/L		91	70 - 130
Benzo[k]fluoranthene	<0.019		1.95	2.11		ug/L		108	70 - 130
beta-BHC	<0.097		1.95	2.21		ug/L		113	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.95	1.80		ug/L		92	70 - 130
Bromacil	<0.097	F1	1.95	2.66	F1	ug/L		136	70 - 130
Butachlor	<0.048	F1	1.95	2.67	F1	ug/L		137	70 - 130

QC Sample Results

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

Job ID: 380-133865-1
 SDG: Weekly

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

Lab Sample ID: 380-133797-B-1-B MS
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Butylbenzylphthalate	<0.48		1.95	2.53		ug/L		130	70 - 130
Chlorobenzilate	<0.097	F1	1.95	2.80	F1	ug/L		144	70 - 130
Chloroneb	<0.097	F2 F1	1.95	2.83	F1	ug/L		145	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.95	2.33		ug/L		119	70 - 130
Chlorpyrifos	<0.048		1.95	2.30		ug/L		118	70 - 130
Chrysene	<0.019		1.95	1.96		ug/L		101	70 - 130
delta-BHC	<0.097		1.95	2.20		ug/L		113	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.95	1.56		ug/L		80	70 - 130
Dibenz(a,h)anthracene	<0.048		1.95	1.75		ug/L		90	70 - 130
Diclorvos (DDVP)	<0.048		1.95	2.46		ug/L		126	70 - 130
Dieldrin	<0.0097		1.95	2.19		ug/L		112	70 - 130
Diethylphthalate	<0.48		1.95	2.44		ug/L		120	70 - 130
Dimethylphthalate	<0.48		1.95	2.31		ug/L		119	70 - 130
Di-n-butyl phthalate	<0.97	F1	3.90	30.1	E F1	ug/L		772	70 - 130
Di-n-octyl phthalate	<0.097		1.95	1.40		ug/L		72	70 - 130
Endosulfan I (Alpha)	<0.097		1.95	2.15		ug/L		110	70 - 130
Endosulfan II (Beta)	<0.097		1.95	2.28		ug/L		117	70 - 130
Endosulfan sulfate	<0.097		1.95	2.27		ug/L		117	70 - 130
Endrin	<0.0097		1.95	2.32		ug/L		119	70 - 130
Endrin aldehyde	<0.097	F1	1.95	0.291	F1	ug/L		15	60 - 130
EPTC	<0.097		1.95	2.19		ug/L		112	70 - 130
Fluoranthene	<0.097		1.95	2.32		ug/L		119	70 - 130
Fluorene	<0.048		1.95	2.09		ug/L		107	70 - 130
gamma-Chlordane	<0.048		1.95	1.95		ug/L		100	70 - 130
Heptachlor	<0.0097		1.95	2.23		ug/L		115	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.95	2.19		ug/L		112	70 - 130
Hexachlorobenzene	<0.048		1.95	1.91		ug/L		98	70 - 130
Hexachlorocyclopentadiene	<0.048		1.95	2.27		ug/L		116	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.95	1.86		ug/L		96	70 - 130
Isophorone	<0.097		1.95	2.15		ug/L		110	70 - 130
Lindane	<0.0097		1.95	2.18		ug/L		112	70 - 130
Malathion	<0.097	F1	1.95	2.68	F1	ug/L		138	70 - 130
Methoxychlor	<0.048	F1	1.95	2.61	F1	ug/L		134	70 - 130
Metolachlor	<0.048		1.95	2.46		ug/L		126	70 - 130
Molinate	<0.097		1.95	2.26		ug/L		116	70 - 130
Naphthalene	<0.097		1.95	1.96		ug/L		101	70 - 130
Parathion	<0.097	F1	1.95	2.69	F1	ug/L		138	70 - 130
Pendimethalin (Penoxaline)	<0.097	F1	1.95	2.67	F1	ug/L		137	70 - 130
Phenanthrene	<0.039		1.95	2.16		ug/L		111	70 - 130
Propachlor	<0.048	F1	1.95	2.49		ug/L		128	70 - 130
Pyrene	<0.048		1.95	2.27		ug/L		117	70 - 130
Simazine	<0.048	F1	1.95	2.64	F1	ug/L		135	70 - 130
Terbacil	<0.097	F1	1.95	3.13	F1	ug/L		161	70 - 130
Terbutylazine	<0.097		1.95	2.35		ug/L		120	70 - 130
Thiobencarb	<0.097		1.95	2.35		ug/L		120	70 - 130
trans-Nonachlor	<0.048		1.95	1.81		ug/L		93	70 - 130
Trifluralin	<0.097	F1	1.95	2.50		ug/L		128	70 - 130

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: 380-133797-B-1-B MS
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 133645

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	102		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	119		70 - 130

Lab Sample ID: 380-133797-B-1-C MSD
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
1-Methylnaphthalene	<0.097		1.96	2.08		ug/L		106	70 - 130	6	20	
2,4'-DDD	<0.097		1.96	2.13		ug/L		109	70 - 130	4	20	
2,4'-DDE	<0.097		1.96	1.89		ug/L		96	70 - 130	6	20	
2,4'-DDT	<0.097		1.96	2.04		ug/L		104	70 - 130	8	20	
2,4-Dinitrotoluene	<0.097		1.96	2.50		ug/L		127	70 - 130	1	20	
2,6-Dinitrotoluene	<0.097	F1	1.96	3.51	F1	ug/L		179	70 - 130	3	20	
2-Methylnaphthalene	<0.097		1.96	1.92		ug/L		98	70 - 130	2	20	
4,4'-DDD	<0.097		1.96	2.28		ug/L		116	70 - 130	4	20	
4,4'-DDE	<0.097		1.96	1.87		ug/L		95	70 - 130	5	20	
4,4'-DDT	<0.097		1.96	2.02		ug/L		103	70 - 130	9	20	
Acenaphthene	<0.097		1.96	1.93		ug/L		98	70 - 130	1	20	
Acenaphthylene	<0.097		1.96	2.12		ug/L		108	70 - 130	0	20	
Acetochlor	<0.097		1.96	2.55		ug/L		130	70 - 130	3	20	
Alachlor	<0.048		1.96	2.52		ug/L		128	70 - 130	0	20	
alpha-BHC	<0.097		1.96	2.18		ug/L		111	70 - 130	0	20	
alpha-Chlordane	<0.048		1.96	2.07		ug/L		105	70 - 130	4	20	
Anthracene	<0.019	F1	1.96	1.15	F1	ug/L		59	70 - 130	15	20	
Atrazine	<0.048		1.96	2.18		ug/L		111	70 - 130	0	20	
Benz(a)anthracene	<0.048		1.96	1.98		ug/L		101	70 - 130	2	20	
Benzo[a]pyrene	<0.019		1.96	1.97		ug/L		101	70 - 130	3	20	
Benzo[b]fluoranthene	<0.019		1.96	2.34		ug/L		120	70 - 130	6	20	
Benzo[g,h,i]perylene	<0.048		1.96	1.77		ug/L		90	70 - 130	0	20	
Benzo[k]fluoranthene	<0.019		1.96	2.05		ug/L		104	70 - 130	3	20	
beta-BHC	<0.097		1.96	2.28		ug/L		116	70 - 130	3	20	
Bis(2-ethylhexyl) phthalate	<0.58		1.96	2.06		ug/L		105	70 - 130	13	20	
Bromacil	<0.097	F1	1.96	2.49		ug/L		127	70 - 130	7	20	
Butachlor	<0.048	F1	1.96	2.65	F1	ug/L		135	70 - 130	1	20	
Butylbenzylphthalate	<0.48		1.96	2.47		ug/L		126	70 - 130	2	20	
Chlorobenzilate	<0.097	F1	1.96	2.79	F1	ug/L		142	70 - 130	1	20	
Chloroneb	<0.097	F2 F1	1.96	2.22	F2	ug/L		113	70 - 130	24	20	
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	2.30		ug/L		117	70 - 130	1	20	
Chlorpyrifos	<0.048		1.96	2.28		ug/L		116	70 - 130	1	20	
Chrysene	<0.019		1.96	2.00		ug/L		102	70 - 130	2	20	
delta-BHC	<0.097		1.96	2.12		ug/L		108	70 - 130	4	20	
Di(2-ethylhexyl)adipate	<0.58		1.96	1.80		ug/L		92	70 - 130	15	20	
Dibenz(a,h)anthracene	<0.048		1.96	1.84		ug/L		94	70 - 130	5	20	
Diclorvos (DDVP)	<0.048		1.96	2.45		ug/L		125	70 - 130	0	20	
Dieldrin	<0.0097		1.96	2.22		ug/L		113	70 - 130	2	20	
Diethylphthalate	<0.48		1.96	2.45		ug/L		120	70 - 130	1	20	

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: 380-133797-B-1-C MSD

Matrix: Water

Analysis Batch: 133846

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 133645

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Dimethylphthalate	<0.48		1.96	2.31		ug/L		118	70 - 130	0	20
Di-n-butyl phthalate	<0.97	F1	3.92	31.1	E F1	ug/L		793	70 - 130	3	20
Di-n-octyl phthalate	<0.097		1.96	1.71		ug/L		87	70 - 130	20	20
Endosulfan I (Alpha)	<0.097		1.96	2.16		ug/L		110	70 - 130	0	20
Endosulfan II (Beta)	<0.097		1.96	2.33		ug/L		119	70 - 130	2	20
Endosulfan sulfate	<0.097		1.96	2.18		ug/L		111	70 - 130	4	20
Endrin	<0.0097		1.96	2.34		ug/L		119	70 - 130	1	20
Endrin aldehyde	<0.097	F1	1.96	0.278	F1	ug/L		14	60 - 130	5	20
EPTC	<0.097		1.96	2.19		ug/L		112	70 - 130	0	20
Fluoranthene	<0.097		1.96	2.31		ug/L		118	70 - 130	0	20
Fluorene	<0.048		1.96	2.08		ug/L		106	70 - 130	0	20
gamma-Chlordane	<0.048		1.96	2.04		ug/L		104	70 - 130	4	20
Heptachlor	<0.0097		1.96	2.21		ug/L		113	70 - 130	1	20
Heptachlor epoxide (isomer B)	<0.0097		1.96	2.21		ug/L		113	70 - 130	1	20
Hexachlorobenzene	<0.048		1.96	1.93		ug/L		99	70 - 130	1	20
Hexachlorocyclopentadiene	<0.048		1.96	2.39		ug/L		122	70 - 130	5	20
Indeno[1,2,3-cd]pyrene	<0.048		1.96	1.96		ug/L		100	70 - 130	5	20
Isophorone	<0.097		1.96	2.19		ug/L		111	70 - 130	2	20
Lindane	<0.0097		1.96	2.19		ug/L		112	70 - 130	1	20
Malathion	<0.097	F1	1.96	2.60	F1	ug/L		133	70 - 130	3	20
Methoxychlor	<0.048	F1	1.96	2.62	F1	ug/L		133	70 - 130	0	20
Metolachlor	<0.048		1.96	2.39		ug/L		122	70 - 130	3	20
Molinate	<0.097		1.96	2.26		ug/L		115	70 - 130	0	20
Naphthalene	<0.097		1.96	1.93		ug/L		98	70 - 130	2	20
Parathion	<0.097	F1	1.96	2.69	F1	ug/L		137	70 - 130	0	20
Pendimethalin (Penoxaline)	<0.097	F1	1.96	2.74	F1	ug/L		140	70 - 130	3	20
Phenanthrene	<0.039		1.96	2.15		ug/L		110	70 - 130	0	20
Propachlor	<0.048	F1	1.96	2.65	F1	ug/L		135	70 - 130	6	20
Pyrene	<0.048		1.96	2.27		ug/L		116	70 - 130	0	20
Simazine	<0.048	F1	1.96	2.57	F1	ug/L		131	70 - 130	3	20
Terbacil	<0.097	F1	1.96	2.67	F1	ug/L		136	70 - 130	16	20
Terbutylazine	<0.097		1.96	2.36		ug/L		120	70 - 130	0	20
Thiobencarb	<0.097		1.96	2.33		ug/L		119	70 - 130	1	20
trans-Nonachlor	<0.048		1.96	1.93		ug/L		98	70 - 130	6	20
Trifluralin	<0.097	F1	1.96	2.62	F1	ug/L		133	70 - 130	4	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	118		70 - 130

Lab Sample ID: 380-133797-B-1-D DU

Matrix: Water

Analysis Batch: 133846

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 133645

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
2,4'-DDD	<0.097		<0.097		ug/L		NC	20

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QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: 380-133797-B-1-D DU
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,4'-DDE	<0.097		<0.097		ug/L		NC	20
2,4'-DDT	<0.097		<0.097		ug/L		NC	20
2,4-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2,6-Dinitrotoluene	<0.097	F1	<0.097		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
4,4'-DDD	<0.097		<0.097		ug/L		NC	20
4,4'-DDE	<0.097		<0.097		ug/L		NC	20
4,4'-DDT	<0.097		<0.097		ug/L		NC	20
Acenaphthene	<0.097		<0.097		ug/L		NC	20
Acenaphthylene	<0.097		<0.097		ug/L		NC	20
Acetochlor	<0.097		<0.097		ug/L		NC	20
Alachlor	<0.048		<0.049		ug/L		NC	20
alpha-BHC	<0.097		<0.097		ug/L		NC	20
alpha-Chlordane	<0.048		<0.049		ug/L		NC	20
Anthracene	<0.019	F1	<0.019		ug/L		NC	20
Atrazine	<0.048		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.048		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.048		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.097		<0.097		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.58		ug/L		NC	20
Bromacil	<0.097	F1	<0.097		ug/L		NC	20
Butachlor	<0.048	F1	<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.48		<0.49		ug/L		NC	20
Chlorobenzilate	<0.097	F1	<0.097		ug/L		NC	20
Chloroneb	<0.097	F2 F1	<0.097		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.097		ug/L		NC	20
Chlorpyrifos	<0.048		<0.049		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.097		<0.097		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.048		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.048		<0.049		ug/L		NC	20
Dieldrin	<0.0097		<0.0097		ug/L		NC	20
Diethylphthalate	<0.48		<0.49		ug/L		NC	20
Dimethylphthalate	<0.48		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.97	F1	<0.97		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.097		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.097		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.097		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.097		ug/L		NC	20
Endrin	<0.0097		<0.0097		ug/L		NC	20
Endrin aldehyde	<0.097	F1	<0.097		ug/L		NC	20
EPTC	<0.097		<0.097		ug/L		NC	20
Fluoranthene	<0.097		<0.097		ug/L		NC	20
Fluorene	<0.048		<0.049		ug/L		NC	20
gamma-Chlordane	<0.048		<0.049		ug/L		NC	20

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: 380-133797-B-1-D DU
Matrix: Water
Analysis Batch: 133846

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 133645

Analyte	Sample	Sample Qualifier	DU	DU	Unit	D	RPD	Limit
	Result		Result	Qualifier				
Heptachlor	<0.0097		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0097		ug/L		NC	20
Hexachlorobenzene	<0.048		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.048		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.048		<0.049		ug/L		NC	20
Isophorone	<0.097		<0.097		ug/L		NC	20
Lindane	<0.0097		<0.0097		ug/L		NC	20
Malathion	<0.097	F1	<0.097		ug/L		NC	20
Methoxychlor	<0.048	F1	<0.049		ug/L		NC	20
Metolachlor	<0.048		<0.049		ug/L		NC	20
Molinate	<0.097		<0.097		ug/L		NC	20
Naphthalene	<0.097		<0.097		ug/L		NC	20
Parathion	<0.097	F1	<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097	F1	<0.097		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.048	F1	<0.049		ug/L		NC	20
Pyrene	<0.048		<0.049		ug/L		NC	20
Simazine	<0.048	F1	<0.049		ug/L		NC	20
Terbacil	<0.097	F1	<0.097		ug/L		NC	20
Terbutylazine	<0.097		<0.097		ug/L		NC	20
Thiobencarb	<0.097		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.048		<0.049		ug/L		NC	20
Trifluralin	<0.097	F1	<0.097		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	105		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	120		70 - 130

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

Lab Sample ID: MB 570-533375/6
Matrix: Water
Analysis Batch: 533375

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			02/13/25 11:55	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	91		38 - 134		02/13/25 11:55	1

Lab Sample ID: LCS 570-533375/4
Matrix: Water
Analysis Batch: 533375

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>LCS</i> Qualifier	<i>Limits</i>
4-Bromofluorobenzene (Surr)	98		38 - 134

Lab Sample ID: LCSD 570-533375/5
Matrix: Water
Analysis Batch: 533375

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

<i>Analyte</i>	<i>Spike</i> Added	<i>LCSD</i> Result	<i>LCSD</i> Qualifier	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> Limits	<i>RPD</i>	<i>RPD</i> Limit
Gasoline Range Organics (C4-C13)	400	373		ug/L		93	78 - 120	5	10

<i>Surrogate</i>	<i>LCSD</i> %Recovery	<i>LCSD</i> Qualifier	<i>Limits</i>
4-Bromofluorobenzene (Surr)	97		38 - 134

Lab Sample ID: MRL 570-533375/3
Matrix: Water
Analysis Batch: 533375

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

<i>Analyte</i>	<i>Spike</i> Added	<i>MRL</i> Result	<i>MRL</i> Qualifier	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> Limits
Gasoline Range Organics (C4-C13)	10.0	11.4		ug/L		114	50 - 150

<i>Surrogate</i>	<i>MRL</i> %Recovery	<i>MRL</i> Qualifier	<i>Limits</i>
4-Bromofluorobenzene (Surr)	94		38 - 134

Lab Sample ID: 380-133869-B-1 MS
Matrix: Water
Analysis Batch: 533375

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

<i>Analyte</i>	<i>Sample</i> Result	<i>Sample</i> Qualifier	<i>Spike</i> Added	<i>MS</i> Result	<i>MS</i> Qualifier	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> Limits
Gasoline Range Organics (C4-C13)	<10		400	392		ug/L		98	68 - 122

<i>Surrogate</i>	<i>MS</i> %Recovery	<i>MS</i> Qualifier	<i>Limits</i>
4-Bromofluorobenzene (Surr)	94		38 - 134

Lab Sample ID: 380-133869-B-1 MSD
Matrix: Water
Analysis Batch: 533375

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

<i>Analyte</i>	<i>Sample</i> Result	<i>Sample</i> Qualifier	<i>Spike</i> Added	<i>MSD</i> Result	<i>MSD</i> Qualifier	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec</i> Limits	<i>RPD</i>	<i>RPD</i> Limit
Gasoline Range Organics (C4-C13)	<10		400	391		ug/L		98	68 - 122	0	18

<i>Surrogate</i>	<i>MSD</i> %Recovery	<i>MSD</i> Qualifier	<i>Limits</i>
4-Bromofluorobenzene (Surr)	95		38 - 134

QC Sample Results

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

Job ID: 380-133865-1
SDG: Weekly

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

Lab Sample ID: MB 570-531752/1-A
Matrix: Water
Analysis Batch: 532732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 531752

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		02/09/25 14:11	02/11/25 21:49	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		02/09/25 14:11	02/11/25 21:49	1
C8-C18	<25		25	ug/L		02/09/25 14:11	02/11/25 21:49	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
<i>n-Octacosane (Surr)</i>	100		60 - 130			02/09/25 14:11	02/11/25 21:49	1

Lab Sample ID: LCS 570-531752/2-A
Matrix: Water
Analysis Batch: 532732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 531752

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits		
		Result	Qualifier						
C10-C28	1600	977		ug/L		61	56 - 127		
Surrogate	LCS LCS		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	90		60 - 130						

Lab Sample ID: LCSD 570-531752/3-A
Matrix: Water
Analysis Batch: 532732

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 531752

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
C10-C28	1600	1270	*1	ug/L		80	56 - 127	26	23
Surrogate	LCSD LCSD		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	102		60 - 130						

Lab Sample ID: MRL 570-531752/4-A
Matrix: Water
Analysis Batch: 536893

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 531752

Analyte	Spike Added	MRL MRL		Unit	D	%Rec	%Rec Limits		
		Result	Qualifier						
C10-C28	0.0200	0.0242	J	mg/L		121	50 - 150		
Surrogate	MRL MRL		Limits			%Rec			
	%Recovery	Qualifier							
<i>n-Octacosane (Surr)</i>	83		60 - 130						

Lab Sample ID: 380-133869-C-1-A MS
Matrix: Water
Analysis Batch: 532732

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 531752

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
				Result	Qualifier					
C10-C28	<26	^3+	1640	1290		ug/L		78	70 - 130	
Surrogate	MS MS		Limits					%Rec		
	%Recovery	Qualifier								
<i>n-Octacosane (Surr)</i>	99		60 - 130							

QC Sample Results

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

Job ID: 380-133865-1
 SDG: Weekly

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

Lab Sample ID: 380-133869-C-1-B MSD

Matrix: Water

Analysis Batch: 532732

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 531752

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	^3+	1660	1430		ug/L		86	70 - 130	11	20
Surrogate	MSD %Recovery		MSD Qualifier		Limits						
<i>n</i> -Octacosane (Surr)	109				60 - 130						

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QC Association Summary

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

Job ID: 380-133865-1
SDG: Weekly

GC/MS Semi VOA

Prep Batch: 133645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-133865-1	Ka'amilo Wells	Total/NA	Water	525.2	
MB 380-133645/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-133645/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-133645/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-133797-B-1-B MS	Matrix Spike	Total/NA	Water	525.2	
380-133797-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	
380-133797-B-1-D DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 133846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-133865-1	Ka'amilo Wells	Total/NA	Water	525.2	133645
MB 380-133645/21-A	Method Blank	Total/NA	Water	525.2	133645
LCS 380-133645/23-A	Lab Control Sample	Total/NA	Water	525.2	133645
MRL 380-133645/22-A	Lab Control Sample	Total/NA	Water	525.2	133645
380-133797-B-1-B MS	Matrix Spike	Total/NA	Water	525.2	133645
380-133797-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	133645
380-133797-B-1-D DU	Duplicate	Total/NA	Water	525.2	133645

GC VOA

Analysis Batch: 533375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-133865-1	Ka'amilo Wells	Total/NA	Water	8015B GRO LL	
380-133865-2	TB: Ka'amilo Wells	Total/NA	Water	8015B GRO LL	
MB 570-533375/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-533375/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-533375/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-533375/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-133869-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-133869-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 531752

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-133865-1	Ka'amilo Wells	Total/NA	Water	3510C	
MB 570-531752/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-531752/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-531752/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-531752/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-133869-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-133869-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 532732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-531752/1-A	Method Blank	Total/NA	Water	8015B	531752
LCS 570-531752/2-A	Lab Control Sample	Total/NA	Water	8015B	531752
LCSD 570-531752/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	531752
380-133869-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	531752
380-133869-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	531752

QC Association Summary

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

Job ID: 380-133865-1
SDG: Weekly

GC Semi VOA

Analysis Batch: 536893

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-133865-1	Ka'amilo Wells	Total/NA	Water	8015B	531752
MRL 570-531752/4-A	Lab Control Sample	Total/NA	Water	8015B	531752

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Lab Chronicle

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

Job ID: 380-133865-1
SDG: Weekly

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-133865-1

Date Collected: 02/03/25 11:37

Matrix: Water

Date Received: 02/05/25 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			133645	IQ42	EA POM	02/07/25 14:02
Total/NA	Analysis	525.2		1	133846	Q8LA	EA POM	02/09/25 15:52
Total/NA	Analysis	8015B GRO LL		1	533375	A9VE	EET CAL 4	02/13/25 16:10
Total/NA	Prep	3510C			531752	TVD6	EET CAL 4	02/09/25 14:11
Total/NA	Analysis	8015B		1	536893	E5RH	EET CAL 4	02/22/25 02:02

Client Sample ID: TB: Ka'amilo Wells

Lab Sample ID: 380-133865-2

Date Collected: 02/03/25 11:37

Matrix: Water

Date Received: 02/05/25 10:26

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	533375	A9VE	EET CAL 4	02/13/25 12:35

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: 380-133865-1
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: 380-133865-1
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

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Method Summary

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

Job ID: 380-133865-1
SDG: Weekly

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

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

Sample Summary

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

Job ID: 380-133865-1
SDG: Weekly

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-133865-1	Ka'amilo Wells	Water	02/03/25 11:37	02/05/25 10:26
380-133865-2	TB: Ka'amilo Wells	Water	02/03/25 11:37	02/05/25 10:26

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Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-133865-1

SDG Number: Weekly

Login Number: 133865

List Number: 1

Creator: Edrosa, Rey

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).	N/A	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-133865-1

SDG Number: Weekly

Login Number: 133865

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 02/06/25 05:57 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	1.8
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	