

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Quarterly

JOB NUMBER

380-131011-1

Eurofins Eaton Analytical Pomona

Job Notes

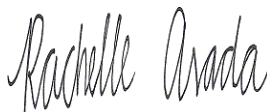
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The test results in this report relate only to the samples as received by the laboratory and meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval 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



Authorized for release by
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Definitions/Glossary

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

Job ID: 380-131011-1
SDG: Quarterly

Qualifiers

GC/MS VOA

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

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*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.

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
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.

HPLC/IC

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

General Chemistry

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Analyte was found in the associated method blank.
F1	MS and/or MSD recovery exceeds control limits.
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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)

Definitions/Glossary

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

Job ID: 380-131011-1
SDG: Quarterly

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: 380-131011-1

Job ID: 380-131011-1

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Job Narrative 380-131011-1

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 1/17/2025 10:28 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 1.3°C.

GC/MS VOA

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

GC/MS Semi VOA

Method 625.1: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-524601. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 625.1 S.I.M

Method 625.1_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-524601. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 625.1 S.I.M

Method 625.1_SIM: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-524601 and analytical batch 570-527743 recovered outside control limits for the following analyte(s): Aniline and Benzidine. Aniline and Benzidine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 625.1_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-524601 and analytical batch 570-527743 recovered outside control limits for the following analytes: Aniline, Benzidine and Benzoic acid.

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

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

GC Semi VOA

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

Hydrocarbons

Method 8015B_DAI: The continuing calibration verification (CCV) associated with 570-524799 recovered high and outside the control limits for Ethanol on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: AIEA WELLS P2 (380-131011-1).

Method 8015B_DAI: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for analytical batch 570-524799 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

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Case Narrative

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

Job ID: 380-131011-1

Job ID: 380-131011-1 (Continued)

Eurofins Eaton Analytical Pomona

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

Pesticides/PCBs

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

HPLC/IC

Method 300.0: The following sample(s) was received with less than 2 days remaining on the holding time or less than one shift (8 hours) remaining on a test with a holding time of 48 hours or less. As such, the laboratory had insufficient time remaining to perform the analysis within holding time: AIEA WELLS P2 (380-131011-1). The client was contacted, and a resample was scheduled.

Method 300_OF_28D_PREC: The continuing calibration blank (CCB) for analytical batch 380-128801 contained Chloride above the method detection limit (MDL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

Metals

Method 200.8: The continuing calibration blank (CCB) for analytical batch 380-129330 contained Arsenic above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

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

Detection Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Bromide	370		5.0	ug/L	1		300.0	Total/NA
Chloride	110	^2	2.5	mg/L	5		300.0	Total/NA
Sulfate	18		1.3	mg/L	5		300.0	Total/NA
Calcium	21		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	19		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	2.6		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	41		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.8		0.90	ug/L	1		200.8	Total/NA
Copper	12		1.0	ug/L	1		200.8	Total/NA
Selenium	2.2		2.0	ug/L	1		200.8	Total/NA
Alkalinity	59		2.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	59	B ^2	2.0	mg/L	1		SM 2320B	Total/NA
Specific Conductance	500		2.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	310		20	mg/L	1		SM 2540C	Total/NA
pH	7.8	HF		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TB: AIEA WELLS P2

Lab Sample ID: 380-131011-2

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Method: EPA-DW 524.2 - Total Trihalomethanes

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50	ug/L			01/29/25 23:45	1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			01/23/25 01:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/23/25 01:49	1
4-Bromofluorobenzene (Surr)	103		70 - 130		01/23/25 01:49	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		01/23/25 01:49	1

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1-Dichloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,1-Dichloropropene	<0.50		0.50	ug/L			01/29/25 23:45	1
1,2,3-Trichlorobenzene	<0.50	^3+	0.50	ug/L			01/29/25 23:45	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,2,4-Trichlorobenzene	<0.50	^3+	0.50	ug/L			01/29/25 23:45	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
1,2-Dichloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,2-Dichloropropane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
1,3-Dichloropropane	<0.50		0.50	ug/L			01/29/25 23:45	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			01/29/25 23:45	1
2,2-Dichloropropane	<0.50		0.50	ug/L			01/29/25 23:45	1
2-Butanone (MEK)	<5.0		5.0	ug/L			01/29/25 23:45	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			01/29/25 23:45	1
Acetone	<500	*1	500	ug/L			01/29/25 23:45	1
Benzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromobenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromochloromethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromodichloromethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromoethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromoform	<0.50		0.50	ug/L			01/29/25 23:45	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			01/29/25 23:45	1
Carbon disulfide	<0.50		0.50	ug/L			01/29/25 23:45	1
Carbon tetrachloride	<0.50		0.50	ug/L			01/29/25 23:45	1
Chlorobenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Chlorodibromomethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Chloroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			01/29/25 23:45	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			01/29/25 23:45	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 23:45	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			01/29/25 23:45	1
Dibromomethane	<0.50		0.50	ug/L			01/29/25 23:45	1

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Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Dichloromethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Diisopropyl ether	<3.0		3.0	ug/L			01/29/25 23:45	1
Ethylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Hexachlorobutadiene	<0.50	^3+	0.50	ug/L			01/29/25 23:45	1
Isopropylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
m,p-Xylenes	<0.50		0.50	ug/L			01/29/25 23:45	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			01/29/25 23:45	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			01/29/25 23:45	1
Naphthalene	<0.50	^3+	0.50	ug/L			01/29/25 23:45	1
n-Butylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
N-Propylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
o-Chlorotoluene	<0.50		0.50	ug/L			01/29/25 23:45	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			01/29/25 23:45	1
o-Xylene	<0.50		0.50	ug/L			01/29/25 23:45	1
p-Chlorotoluene	<0.50		0.50	ug/L			01/29/25 23:45	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			01/29/25 23:45	1
p-Isopropyltoluene	<0.50		0.50	ug/L			01/29/25 23:45	1
sec-Butylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Styrene	<0.50		0.50	ug/L			01/29/25 23:45	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			01/29/25 23:45	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			01/29/25 23:45	1
tert-Butylbenzene	<0.50		0.50	ug/L			01/29/25 23:45	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			01/29/25 23:45	1
Toluene	<0.50		0.50	ug/L			01/29/25 23:45	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 23:45	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			01/29/25 23:45	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			01/29/25 23:45	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			01/29/25 23:45	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			01/29/25 23:45	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			01/29/25 23:45	1
Xylenes, Total	<0.50		0.50	ug/L			01/29/25 23:45	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.92	T J	ug/L		10.38	N/A		01/29/25 23:45	1
Unknown	0.77	T J	ug/L		14.61	N/A		01/29/25 23:45	1
Unknown	0.55	T J	ug/L		14.77	N/A		01/29/25 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		01/29/25 23:45	1
4-Bromofluorobenzene (Surr)	99		70 - 130		01/29/25 23:45	1
Toluene-d8 (Surr)	100		70 - 130		01/29/25 23:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
2,4'-DDE	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
2,4'-DDT	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
4,4'-DDE	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
4,4'-DDT	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Acenaphthene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Acenaphthylene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Acetochlor	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Alachlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
alpha-BHC	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
alpha-Chlordane	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Anthracene	<0.019		0.019	ug/L		01/21/25 06:08	01/21/25 18:08	1
Atrazine	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Benz(a)anthracene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Benzo[a]pyrene	<0.019		0.019	ug/L		01/21/25 06:08	01/21/25 18:08	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		01/21/25 06:08	01/21/25 18:08	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		01/21/25 06:08	01/21/25 18:08	1
beta-BHC	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		01/21/25 06:08	01/21/25 18:08	1
Aldrin	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Bromacil	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Butachlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Butylbenzylphthalate	<0.48		0.48	ug/L		01/21/25 06:08	01/21/25 18:08	1
Chlorobenzilate	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Chloroneb	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Chlorpyrifos	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Chrysene	<0.019		0.019	ug/L		01/21/25 06:08	01/21/25 18:08	1
delta-BHC	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		01/21/25 06:08	01/21/25 18:08	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Dieldrin	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Diethylphthalate	<0.48		0.48	ug/L		01/21/25 06:08	01/21/25 18:08	1
Dimethylphthalate	<0.48		0.48	ug/L		01/21/25 06:08	01/21/25 18:08	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		01/21/25 06:08	01/21/25 18:08	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Endosulfan sulfate	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Endrin	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Endrin aldehyde	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
EPTC	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Fluoranthene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Fluorene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
gamma-BHC (Lindane)	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
gamma-Chlordane	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Heptachlor	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Hexachlorobenzene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Isophorone	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Malathion	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Methoxychlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Metolachlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Molinate	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Naphthalene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Parathion	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Phenanthrene	<0.039		0.039	ug/L		01/21/25 06:08	01/21/25 18:08	1
Propachlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Pyrene	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Simazine	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Terbacil	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Terbutylazine	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Thiobencarb	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		01/21/25 06:08	01/21/25 18:08	1
trans-Nonachlor	<0.048		0.048	ug/L		01/21/25 06:08	01/21/25 18:08	1
Trifluralin	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
1-Methylnaphthalene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1
2-Methylnaphthalene	<0.097		0.097	ug/L		01/21/25 06:08	01/21/25 18:08	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	01/21/25 06:08	01/21/25 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	01/21/25 06:08	01/21/25 18:08	1
Perylene-d12	91		70 - 130	01/21/25 06:08	01/21/25 18:08	1
Triphenylphosphate	100		70 - 130	01/21/25 06:08	01/21/25 18:08	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		01/20/25 13:18	01/29/25 19:23	1
2,4,5-Trichlorophenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
2,4,6-Trichlorophenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
2,4-Dichlorophenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
2,4-Dinitrophenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
2,6-Dichlorophenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Chloronaphthalene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Chlorophenol	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Methylnaphthalene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Methylphenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Nitroaniline	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
2-Nitrophenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
3/4-Methylphenol	<1.9		1.9	ug/L		01/20/25 13:18	01/29/25 19:23	1
3-Nitroaniline	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
4,6-Dinitro-2-methylphenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
4-Chloro-3-methylphenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
4-Nitroaniline	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
4-Nitrophenol	<4.8		4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
Acenaphthene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Acenaphthylene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Aniline	<0.19	*- *1	0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Anthracene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzidine	<4.8	*- *1	4.8	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzo[a]anthracene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzo[a]pyrene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzoic acid	<9.6	*1	9.6	ug/L		01/20/25 13:18	01/29/25 19:23	1
Benzyl alcohol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
bis (2-Chloroisopropyl) ether	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Chrysene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Dibenzofuran	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Fluoranthene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Fluorene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Hexachloroethane	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Naphthalene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Nitrobenzene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
N-Nitrosodi-n-propylamine	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
N-Nitrosodiphenylamine	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Pentachlorophenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
Phenanthrene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1
Phenol	<0.96		0.96	ug/L		01/20/25 13:18	01/29/25 19:23	1
Pyrene	<0.19		0.19	ug/L		01/20/25 13:18	01/29/25 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		28 - 127	01/20/25 13:18	01/29/25 19:23	1
2-Fluorobiphenyl (Surr)	70		31 - 120	01/20/25 13:18	01/29/25 19:23	1
2-Fluorophenol (Surr)	47		17 - 120	01/20/25 13:18	01/29/25 19:23	1
Nitrobenzene-d5 (Surr)	76		27 - 120	01/20/25 13:18	01/29/25 19:23	1
Phenol-d6 (Surr)	30		10 - 120	01/20/25 13:18	01/29/25 19:23	1
p-Terphenyl-d14 (Surr)	74		45 - 120	01/20/25 13:18	01/29/25 19:23	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
2-Butenal, 3-methyl-	6.7	T J N	ug/L		2.76	107-86-8	01/20/25 13:18	01/27/25 16:25	1
1-Butanol, 3-methyl-, carbonate (2:1)	5.7	T J N	ug/L		2.85	2050-95-5	01/20/25 13:18	01/27/25 16:25	1
Cyclohexane, 1-methyl-2-propyl-	6.2	T J N	ug/L		2.98	4291-79-6	01/20/25 13:18	01/27/25 16:25	1
Unknown	4.4	T J	ug/L		7.19	N/A	01/20/25 13:18	01/27/25 16:25	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	96		33 - 139	01/20/25 13:18	01/27/25 16:25	1
2-Fluorobiphenyl (Surr)	67		33 - 126	01/20/25 13:18	01/27/25 16:25	1
2-Fluorophenol (Surr)	54		12 - 120	01/20/25 13:18	01/27/25 16:25	1
Nitrobenzene-d5 (Surr)	75		36 - 120	01/20/25 13:18	01/27/25 16:25	1
Phenol-d6 (Surr)	30		10 - 120	01/20/25 13:18	01/27/25 16:25	1
p-Terphenyl-d14 (Surr)	73		47 - 131	01/20/25 13:18	01/27/25 16:25	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			01/22/25 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		38 - 134		01/22/25 18:24	1

Method: EPA-DW2 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.020		0.020	ug/L		01/20/25 19:00	01/21/25 04:22	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		01/20/25 19:00	01/21/25 04:22	1
1,2-Dibromoethane	<0.010		0.010	ug/L		01/20/25 19:00	01/21/25 04:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	103		60 - 140	01/20/25 19:00	01/21/25 04:22	1

Method: EPA 505 - Organochlorine Pesticides/PCBs (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.50		0.50	ug/L		01/20/25 12:06	01/21/25 03:15	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1016	<0.070		0.070	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1221	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1232	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1242	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1248	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1254	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1
PCB-1260	<0.070		0.070	ug/L		01/20/25 12:06	01/21/25 03:15	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		01/20/25 12:06	01/21/25 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	90		70 - 130	01/20/25 12:06	01/21/25 03:15	1
Tetrachloro-m-xylene	91		70 - 130	01/20/25 12:06	01/21/25 03:15	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		01/20/25 15:09	01/28/25 03:41	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		01/20/25 15:09	01/28/25 03:41	1
C8-C18	<25		25	ug/L		01/20/25 15:09	01/28/25 03:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	80		60 - 130	01/20/25 15:09	01/28/25 03:41	1

Method: SW846 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10	F2	0.10	mg/L			01/21/25 15:46	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	108		54 - 120		01/21/25 15:46	1

Method: EPA 300.0 - Anions, Ion Chromatography								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	370		5.0	ug/L			01/25/25 05:12	1
Chloride	110	^2	2.5	mg/L			01/18/25 02:33	5
Sulfate	18		1.3	mg/L			01/18/25 02:33	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	21		1.0	mg/L			01/20/25 16:14	1
Magnesium	19		0.10	mg/L			01/20/25 16:14	1
Potassium	2.6		1.0	mg/L			01/20/25 16:14	1
Sodium	41		1.0	mg/L			01/20/25 16:14	1

Method: EPA 200.8 - Metals (ICP/MS)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	ug/L			01/18/25 17:58	1
Arsenic	<1.0		1.0	ug/L			01/18/25 17:58	1
Beryllium	<0.30		0.30	ug/L			01/18/25 17:58	1
Cadmium	<0.50		0.50	ug/L			01/18/25 17:58	1
Chromium	1.8		0.90	ug/L			01/18/25 17:58	1
Copper	12		1.0	ug/L			01/18/25 17:58	1
Lead	<0.50		0.50	ug/L			01/18/25 17:58	1
Nickel	<1.0		1.0	ug/L			01/18/25 17:58	1
Selenium	2.2		2.0	ug/L			01/18/25 17:58	1
Silver	<0.50		0.50	ug/L			01/18/25 17:58	1
Thallium	<0.30		0.30	ug/L			01/18/25 17:58	1
Zinc	<20		20	ug/L			01/18/25 17:58	1

Method: EPA 245.1 - Mercury (CVAA)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ug/L		01/24/25 11:57	01/24/25 17:16	1

General Chemistry								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	59		2.0	mg/L			01/22/25 18:37	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	59	B ^2	2.0	mg/L			01/22/25 18:37	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0	mg/L			01/22/25 18:37	1
Specific Conductance (SM 2510B)	500		2.0	umhos/cm			01/22/25 18:37	1
Total Dissolved Solids (SM 2540C)	310		20	mg/L			01/20/25 09:36	1
Fluoride (SM 4500 F C)	<0.050		0.050	mg/L			01/22/25 17:31	1
pH (SM 4500 H+ B)	7.8	HF		SU			01/22/25 18:37	1
Sulfide (SM 4500 S2 D)	<0.050		0.050	mg/L			01/20/25 16:55	1

Client Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: TB: AIEA WELLS P2

Lab Sample ID: 380-131011-2

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Method: EPA-DW 524.2 - Volatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			01/23/25 02:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130				01/23/25 02:13	1
4-Bromofluorobenzene (Surr)	108		70 - 130				01/23/25 02:13	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130				01/23/25 02:13	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			01/22/25 22:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134				01/22/25 22:39	1

Method: EPA-DW2 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.020		0.020	ug/L		01/21/25 18:00	01/22/25 14:45	1
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099	ug/L		01/21/25 18:00	01/22/25 14:45	1
1,2-Dibromoethane	<0.0099		0.0099	ug/L		01/21/25 18:00	01/22/25 14:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	106		60 - 140			01/21/25 18:00	01/22/25 14:45	1

Action Limit Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

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	HI W Limit	HI DW Limit	RL	Method	Prep Type
Trihalomethanes, Total	<0.50		ug/L	80.00	80.00	0.50	524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200.0	0.50	524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
1,1-Dichloroethylene	<0.50		ug/L	7.000	7.000	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000	0.6000	0.50	524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50	^3+	ug/L	70.00	70.00	0.50	524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100.0	0.50	524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70.00	0.50	524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700.0	0.50	524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600.0	0.50	524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75.000	0.50	524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100.0	0.50	524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000	0.50	524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100.0	0.50	524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5.000	0.50	524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2.000	0.30	524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000	0.6000	0.020	504.1	Total/NA
Antimony	<1.0		ug/L	6.000	6.000	1.0	200.8	Total/NA
Arsenic	<1.0		ug/L	10.00	10.00	1.0	200.8	Total/NA
Beryllium	<0.30		ug/L	4.000	4.000	0.30	200.8	Total/NA
Cadmium	<0.50		ug/L	5.000	5.000	0.50	200.8	Total/NA
Chromium	1.8		ug/L	100.0	100.0	0.90	200.8	Total/NA
Selenium	2.2		ug/L	50.00	50.00	2.0	200.8	Total/NA
Thallium	<0.30		ug/L	2.000	2.000	0.30	200.8	Total/NA
Mercury	<0.20		ug/L	2.000	2.000	0.20	245.1	Total/NA
Fluoride	<0.050		mg/L	4	4	0.050	SM 4500 F C	Total/NA

Client Sample ID: TB: AIEA WELLS P2

Lab Sample ID: 380-131011-2

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	HI W Limit	HI DW Limit	RL	Method	Prep Type
1,2,3-Trichloropropane	<0.020		ug/L	0.6000	0.6000	0.020	504.1	Total/NA

Surrogate Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	BFB (70-130)	DCA (70-130)
380-131011-1	AIEA WELLS P2	99	103	100
380-131011-2	TB: AIEA WELLS P2	97	108	98
LCS 380-129749/8	Lab Control Sample	104	96	97
LCSD 380-129749/9	Lab Control Sample Dup	103	100	96
MB 380-129749/11	Method Blank	100	102	96

Surrogate Legend

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (50-150)	BFB (50-150)	DCA (50-150)
MRL 380-129749/10	Lab Control Sample	104	98	97

Surrogate Legend

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		DCA (70-130)	BFB (70-130)	TOL (70-130)
380-131011-1	AIEA WELLS P2	102	99	100
LCS 380-130408/11	Lab Control Sample	93	96	96
LCSD 380-130408/12	Lab Control Sample Dup	94	97	99
MB 380-130408/15	Method Blank	98	103	101
MRL 380-130408/13	Lab Control Sample	103	103	102
MRL 380-130408/14	Lab Control Sample	90	104	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

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)
380-131011-1	AIEA WELLS P2	99	91	100
380-131022-AC-1-A MS	Matrix Spike	99	96	109
380-131022-AD-1-A MSD	Matrix Spike Duplicate	98	97	110
LCS 380-129273/23-A	Lab Control Sample	99	92	110

Eurofins Eaton Analytical Pomona

Surrogate Summary

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

Job ID: 380-131011-1
SDG: Quarterly

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	2NMX (70-130)	PRY (70-130)	TPP (70-130)
MB 380-129273/21-A	Method Blank	98	88	103
MRL 380-129273/22-A	Lab Control Sample	99	85	102
Surrogate Legend				
2NMX = 2-Nitro-m-xylene				
PRY = Perylene-d12				
TPP = Triphenylphosphate				

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-131011-1	AIEA WELLS P2	96	67	54	75	30	73
MB 570-524601/1-A	Method Blank	86	54	51	63	31	65
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)
380-131011-1	AIEA WELLS P2	86	70	47	76	30	74
LCS 570-524601/2-A	Lab Control Sample	84	69	54	64	37	79
LCSD 570-524601/3-A	Lab Control Sample Dup	83	76	59	66	39	82
MB 570-524601/1-A	Method Blank	91	57	44	62	28	68
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: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-130371-C-3 MS	Matrix Spike	101
380-130371-C-3 MSD	Matrix Spike Duplicate	100
380-131011-1	AIEA WELLS P2	98

Eurofins Eaton Analytical Pomona

Surrogate Summary

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

Job ID: 380-131011-1
SDG: Quarterly

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-131011-2	TB: AIEA WELLS P2	97
LCS 570-525353/4	Lab Control Sample	101
LCSD 570-525353/5	Lab Control Sample Dup	104
MB 570-525353/6	Method Blank	104
MRL 570-525353/3	Lab Control Sample	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBPP1 (60-140)
380-130883-A-1-A DU	Duplicate	104
380-130901-C-1-A DU	Duplicate	111
380-130903-B-1-A MS	Matrix Spike	104
380-130905-A-1-A MS	Matrix Spike	105
380-131011-1	AIEA WELLS P2	103
380-131011-2	TB: AIEA WELLS P2	106
LCS 380-129115/29-A	Lab Control Sample	99
LCS 380-129116/29-A	Lab Control Sample	95
MBL 380-129115/4-A	Method Blank	101
MBL 380-129116/4-A	Method Blank	95
MRL 380-129115/2-A	Lab Control Sample	102
MRL 380-129115/3-A	Lab Control Sample	90
MRL 380-129116/2-A	Lab Control Sample	96
MRL 380-129116/3-A	Lab Control Sample	97

Surrogate Legend

DBPP = 1,2-Dibromopropane (Surr)

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (70-130)	TCX2 (70-130)
380-130863-C-1-A MS	Matrix Spike		96
380-130863-D-1-A MS	Matrix Spike	106	
380-130864-B-1-A MS	Matrix Spike		97
380-130864-C-1-A MS	Matrix Spike	100	
380-131011-1	AIEA WELLS P2	90	91
LCS 380-129069/28-A	Lab Control Sample		100
LCS 380-129069/30-A	Lab Control Sample	98	
LCS 380-129069/31-A	Lab Control Sample	95	
LCS 380-129069/39-A	Lab Control Sample		99
LCS 380-129069/47-A	Lab Control Sample	102	
LCSD 380-129069/29-A	Lab Control Sample Dup		102
MB 380-129069/3-A	Method Blank	102	103
MRL 380-129069/1-A	Lab Control Sample		100

Eurofins Eaton Analytical Pomona

Surrogate Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	TCX1 (70-130)	TCX2 (70-130)
MRL 380-129069/2-A	Lab Control Sample	95	
Surrogate Legend			
TCX = Tetrachloro-m-xylene			

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)	
380-130371-B-3-A MS	Matrix Spike	112	
380-130371-B-3-B MSD	Matrix Spike Duplicate	89	
380 131011 1	AIEA WELLS P2	80	
LCS 570-524661/2-A	Lab Control Sample	86	
LCSD 570-524661/3-A	Lab Control Sample Dup	88	
MB 570-524661/1-A	Method Blank	85	
MRL 570-524661/4-A	Lab Control Sample	90	
Surrogate Legend			
OTCSN = n-Octacosane (Surr)			

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	HF2PP1 (54-120)	
380-131011-1	AIEA WELLS P2	108	
380-131011-1 MS	AIEA WELLS P2	75	
380-131011-1 MSD	AIEA WELLS P2	108	
LCS 570-524799/12	Lab Control Sample	86	
LCSD 570-524799/13	Lab Control Sample Dup	95	
MB 570-524799/11	Method Blank	104	
MRL 570-524799/14	Lab Control Sample	111	
Surrogate Legend			
HF2PP = Hexafluoro-2-propanol (Surr)			

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 380-130408/15

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1-Dichloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,1-Dichloropropene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2-Dichloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,2-Dichloropropane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
1,3-Dichloropropane	<0.50		0.50	ug/L			01/29/25 21:52	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			01/29/25 21:52	1
2,2-Dichloropropane	<0.50		0.50	ug/L			01/29/25 21:52	1
2-Butanone (MEK)	<5.0		5.0	ug/L			01/29/25 21:52	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			01/29/25 21:52	1
Acetone	<500		500	ug/L			01/29/25 21:52	1
Benzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromobenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromochloromethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromodichloromethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromoethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromoform	<0.50		0.50	ug/L			01/29/25 21:52	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			01/29/25 21:52	1
Carbon disulfide	<0.50		0.50	ug/L			01/29/25 21:52	1
Carbon tetrachloride	<0.50		0.50	ug/L			01/29/25 21:52	1
Chlorobenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Chlorodibromomethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Chloroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			01/29/25 21:52	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			01/29/25 21:52	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 21:52	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			01/29/25 21:52	1
Dibromomethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Dichloromethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Diisopropyl ether	<3.0		3.0	ug/L			01/29/25 21:52	1
Ethylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Hexachlorobutadiene	<0.50		0.50	ug/L			01/29/25 21:52	1
Isopropylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
m,p-Xylenes	<0.50		0.50	ug/L			01/29/25 21:52	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			01/29/25 21:52	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			01/29/25 21:52	1
Naphthalene	<0.50		0.50	ug/L			01/29/25 21:52	1
n-Butylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 380-130408/15

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
o-Chlorotoluene	<0.50		0.50	ug/L			01/29/25 21:52	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			01/29/25 21:52	1
o-Xylene	<0.50		0.50	ug/L			01/29/25 21:52	1
p-Chlorotoluene	<0.50		0.50	ug/L			01/29/25 21:52	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			01/29/25 21:52	1
p-Isopropyltoluene	<0.50		0.50	ug/L			01/29/25 21:52	1
sec-Butylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Styrene	<0.50		0.50	ug/L			01/29/25 21:52	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			01/29/25 21:52	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			01/29/25 21:52	1
tert-Butylbenzene	<0.50		0.50	ug/L			01/29/25 21:52	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			01/29/25 21:52	1
Toluene	<0.50		0.50	ug/L			01/29/25 21:52	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			01/29/25 21:52	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			01/29/25 21:52	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			01/29/25 21:52	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			01/29/25 21:52	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			01/29/25 21:52	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			01/29/25 21:52	1
Xylenes, Total	<0.50		0.50	ug/L			01/29/25 21:52	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1.39	T J	ug/L		14.61	N/A		01/29/25 21:52	1
Unknown	1.07	T J	ug/L		14.77	N/A		01/29/25 21:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		01/29/25 21:52	1
4-Bromofluorobenzene (Surr)	103		70 - 130		01/29/25 21:52	1
Toluene-d8 (Surr)	101		70 - 130		01/29/25 21:52	1

Lab Sample ID: LCS 380-130408/11

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.52		ug/L		90	70 - 130
1,1,1-Trichloroethane	5.00	4.87		ug/L		97	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.82		ug/L		96	70 - 130
1,1,2-Trichloroethane	5.00	5.13		ug/L		103	70 - 130
1,1-Dichloroethylene	5.00	5.62		ug/L		112	70 - 130
1,1-Dichloroethane	5.00	5.37		ug/L		107	70 - 130
1,1-Dichloropropene	5.00	4.95		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	5.00	5.66		ug/L		113	70 - 130
1,2,3-Trichloropropane	5.00	5.15		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	5.00	5.11		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	5.00	4.88		ug/L		98	70 - 130
1,2-Dichloroethane	5.00	4.74		ug/L		95	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-130408/11

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	5.00	4.83		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	5.00	4.67		ug/L		93	70 - 130
1,3-Dichloropropane	5.00	4.73		ug/L		95	70 - 130
1,3-Dichloropropene, Total	10.0	9.00		ug/L		90	70 - 130
2,2-Dichloropropane	5.00	5.00		ug/L		100	70 - 130
2-Butanone (MEK)	50.0	38.9		ug/L		78	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	44.8		ug/L		90	70 - 130
Acetone	50.0	37.6	J	ug/L		75	70 - 130
Benzene	5.00	4.89		ug/L		98	70 - 130
Bromobenzene	5.00	4.81		ug/L		96	70 - 130
Bromochloromethane	5.00	4.93		ug/L		99	70 - 130
Bromodichloromethane	5.00	4.20		ug/L		84	70 - 130
Bromoethane	5.00	5.34		ug/L		107	70 - 130
Bromoform	5.00	4.44		ug/L		89	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.41		ug/L		108	70 - 130
Carbon disulfide	5.00	4.63		ug/L		93	70 - 130
Carbon tetrachloride	5.00	4.60		ug/L		92	70 - 130
Chlorobenzene	5.00	4.77		ug/L		95	70 - 130
Chlorodibromomethane	5.00	4.33		ug/L		87	70 - 130
cis-1,3-Dichloropropene	5.00	4.60		ug/L		92	70 - 130
Dichloromethane	5.00	5.20		ug/L		104	70 - 130
Diisopropyl ether	5.00	5.05		ug/L		101	70 - 130
Ethylbenzene	5.00	4.91		ug/L		98	70 - 130
Hexachlorobutadiene	5.00	5.17		ug/L		103	70 - 130
Isopropylbenzene	5.00	4.85		ug/L		97	70 - 130
m,p-Xylenes	10.0	9.70		ug/L		97	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.79		ug/L		96	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.99		ug/L		100	70 - 130
Naphthalene	5.00	5.91		ug/L		118	70 - 130
n-Butylbenzene	5.00	5.67		ug/L		113	70 - 130
N-Propylbenzene	5.00	4.84		ug/L		97	70 - 130
o-Chlorotoluene	5.00	5.09		ug/L		102	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.36		ug/L		107	70 - 130
o-Xylene	5.00	4.72		ug/L		94	70 - 130
p-Chlorotoluene	5.00	5.09		ug/L		102	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.73		ug/L		95	70 - 130
p-Isopropyltoluene	5.00	4.69		ug/L		94	70 - 130
sec-Butylbenzene	5.00	4.73		ug/L		95	70 - 130
Styrene	5.00	5.51		ug/L		110	70 - 130
Tert-amyl methyl ether	5.00	5.13		ug/L		103	70 - 130
Tert-butyl ethyl ether	5.00	5.25		ug/L		105	70 - 130
tert-Butylbenzene	5.00	4.78		ug/L		96	70 - 130
Tetrachloroethene (PCE)	5.00	4.81		ug/L		96	70 - 130
Toluene	5.00	5.06		ug/L		101	70 - 130
trans-1,2-Dichloroethylene	5.00	5.04		ug/L		101	70 - 130
trans-1,3-Dichloropropene	5.00	4.40		ug/L		88	70 - 130
Trichloroethylene (TCE)	5.00	5.01		ug/L		100	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	6.17		ug/L		123	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 380-130408/11

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Trichlorotrifluoroethane	5.00	5.44		ug/L		109	70 - 130
Vinyl Chloride (VC)	5.00	5.36		ug/L		107	70 - 130
Xylenes, Total	15.0	14.4		ug/L		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	93		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130
Toluene-d8 (Surr)	96		70 - 130

Lab Sample ID: LCSD 380-130408/12

Matrix: Water

Analysis Batch: 130408

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
1,1,1,2-Tetrachloroethane	5.00	4.57		ug/L		91	70 - 130	1	20
1,1,1-Trichloroethane	5.00	4.67		ug/L		93	70 - 130	4	20
1,1,2,2-Tetrachloroethane	5.00	4.71		ug/L		94	70 - 130	2	20
1,1,2-Trichloroethane	5.00	4.92		ug/L		98	70 - 130	4	20
1,1-Dichlorethylene	5.00	5.27		ug/L		105	70 - 130	6	20
1,1-Dichloroethane	5.00	5.07		ug/L		101	70 - 130	6	20
1,1-Dichloropropene	5.00	4.83		ug/L		97	70 - 130	3	20
1,2,3-Trichlorobenzene	5.00	5.68		ug/L		114	70 - 130	0	20
1,2,3-Trichloropropane	5.00	5.04		ug/L		101	70 - 130	2	20
1,2,4-Trichlorobenzene	5.00	5.32		ug/L		106	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.05		ug/L		101	70 - 130	3	20
1,2-Dichloroethane	5.00	4.78		ug/L		96	70 - 130	1	20
1,2-Dichloropropane	5.00	4.84		ug/L		97	70 - 130	0	20
1,3,5-Trimethylbenzene	5.00	4.92		ug/L		98	70 - 130	5	20
1,3-Dichloropropane	5.00	4.76		ug/L		95	70 - 130	1	20
1,3-Dichloropropene, Total	10.0	9.33		ug/L		93	70 - 130	4	20
2,2-Dichloropropane	5.00	4.66		ug/L		93	70 - 130	7	20
2-Butanone (MEK)	50.0	44.8		ug/L		90	70 - 130	14	20
4-Methyl-2-pentanone (MIBK)	50.0	45.9		ug/L		92	70 - 130	3	20
Acetone	50.0	49.0	J *1	ug/L		98	70 - 130	26	20
Benzene	5.00	4.77		ug/L		95	70 - 130	2	20
Bromobenzene	5.00	4.78		ug/L		96	70 - 130	1	20
Bromochloromethane	5.00	5.27		ug/L		105	70 - 130	7	20
Bromodichloromethane	5.00	4.22		ug/L		84	70 - 130	0	20
Bromoethane	5.00	5.19		ug/L		104	70 - 130	3	20
Bromoform	5.00	4.04		ug/L		81	70 - 130	10	20
Bromomethane (Methyl Bromide)	5.00	5.03		ug/L		101	70 - 130	7	20
Carbon disulfide	5.00	4.26		ug/L		85	70 - 130	8	20
Carbon tetrachloride	5.00	4.50		ug/L		90	70 - 130	2	20
Chlorobenzene	5.00	4.86		ug/L		97	70 - 130	2	20
Chlorodibromomethane	5.00	4.31		ug/L		86	70 - 130	0	20
cis-1,3-Dichloropropene	5.00	4.65		ug/L		93	70 - 130	1	20
Dichloromethane	5.00	5.07		ug/L		101	70 - 130	2	20
Diisopropyl ether	5.00	4.94		ug/L		99	70 - 130	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 380-130408/12

Matrix: Water

Analysis Batch: 130408

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
Ethylbenzene	5.00	5.03		ug/L		101	70 - 130	2	20
Hexachlorobutadiene	5.00	5.48		ug/L		110	70 - 130	6	20
Isopropylbenzene	5.00	4.87		ug/L		97	70 - 130	0	20
m,p-Xylenes	10.0	9.71		ug/L		97	70 - 130	0	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.04		ug/L		101	70 - 130	5	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.05		ug/L		101	70 - 130	1	20
Naphthalene	5.00	5.60		ug/L		112	70 - 130	5	20
n-Butylbenzene	5.00	5.59		ug/L		112	70 - 130	1	20
N-Propylbenzene	5.00	5.03		ug/L		101	70 - 130	4	20
o-Chlorotoluene	5.00	5.04		ug/L		101	70 - 130	1	20
o-Dichlorobenzene (1,2-DCB)	5.00	5.12		ug/L		102	70 - 130	4	20
o-Xylene	5.00	4.94		ug/L		99	70 - 130	5	20
p-Chlorotoluene	5.00	5.12		ug/L		102	70 - 130	1	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.00		ug/L		100	70 - 130	6	20
p-Isopropyltoluene	5.00	5.06		ug/L		101	70 - 130	8	20
sec-Butylbenzene	5.00	5.03		ug/L		101	70 - 130	6	20
Styrene	5.00	5.52		ug/L		110	70 - 130	0	20
Tert-amyl methyl ether	5.00	5.22		ug/L		104	70 - 130	2	20
Tert-butyl ethyl ether	5.00	5.21		ug/L		104	70 - 130	1	20
tert-Butylbenzene	5.00	4.94		ug/L		99	70 - 130	3	20
Tetrachloroethene (PCE)	5.00	4.93		ug/L		99	70 - 130	2	20
Toluene	5.00	5.10		ug/L		102	70 - 130	1	20
trans-1,2-Dichloroethylene	5.00	4.92		ug/L		98	70 - 130	2	20
trans-1,3-Dichloropropene	5.00	4.68		ug/L		94	70 - 130	6	20
Trichloroethylene (TCE)	5.00	4.95		ug/L		99	70 - 130	1	20
Trichlorofluoromethane (Freon 11)	5.00	5.81		ug/L		116	70 - 130	6	20
Trichlorotrifluoroethane	5.00	5.14		ug/L		103	70 - 130	6	20
Vinyl Chloride (VC)	5.00	4.93		ug/L		99	70 - 130	8	20
Xylenes, Total	15.0	14.7		ug/L		98	70 - 130	2	20

Surrogate	%Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: MRL 380-130408/13

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
m,p-Xylenes	0.500	0.654		ug/L		131	50 - 150
Vinyl Chloride (VC)	0.250	0.286	J	ug/L		114	50 - 150

Surrogate	%Recovery	MRL Qualifier	MRL Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-130408/14

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	0.500	0.444	J	ug/L		89	50 - 150
1,1,1-Trichloroethane	0.500	0.430	J	ug/L		86	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.589		ug/L		118	50 - 150
1,1,2-Trichloroethane	0.500	0.548		ug/L		110	50 - 150
1,1-Dichloroethylene	0.500	0.499	J	ug/L		100	50 - 150
1,1-Dichloroethane	0.500	0.508		ug/L		102	50 - 150
1,1-Dichloropropene	0.500	0.499	J	ug/L		100	50 - 150
1,2,3-Trichlorobenzene	0.500	0.903	^3+	ug/L		181	50 - 150
1,2,3-Trichloropropane	0.500	0.635		ug/L		127	50 - 150
1,2,4-Trichlorobenzene	0.500	0.821	^3+	ug/L		164	50 - 150
1,2,4-Trimethylbenzene	0.500	0.620		ug/L		124	50 - 150
1,2-Dichloroethane	0.500	0.495	J	ug/L		99	50 - 150
1,2-Dichloropropane	0.500	0.509		ug/L		102	50 - 150
1,3,5-Trimethylbenzene	0.500	0.607		ug/L		121	50 - 150
1,3-Dichloropropane	0.500	0.525		ug/L		105	50 - 150
1,3-Dichloropropene, Total	1.00	0.713		ug/L		71	50 - 150
2,2-Dichloropropane	0.500	0.493	J	ug/L		99	50 - 150
2-Butanone (MEK)	5.00	5.00		ug/L		100	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.99		ug/L		120	50 - 150
Acetone	5.00	4.85	J	ug/L		97	50 - 150
Benzene	0.500	0.556		ug/L		111	50 - 150
Bromobenzene	0.500	0.572		ug/L		114	50 - 150
Bromochloromethane	0.500	0.570		ug/L		114	50 - 150
Bromodichloromethane	0.500	0.372	J	ug/L		74	50 - 150
Bromoethane	0.500	0.583		ug/L		117	50 - 150
Bromoform	0.500	0.399	J	ug/L		80	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.723		ug/L		145	50 - 150
Carbon disulfide	0.500	0.454	J	ug/L		91	50 - 150
Carbon tetrachloride	0.500	0.458	J	ug/L		92	50 - 150
Chlorobenzene	0.500	0.502		ug/L		100	50 - 150
Chlorodibromomethane	0.500	0.415	J	ug/L		83	50 - 150
cis-1,3-Dichloropropene	0.500	0.378	J	ug/L		76	50 - 150
Dichloromethane	0.500	0.569		ug/L		114	50 - 150
Diisopropyl ether	0.500	0.581	J	ug/L		116	50 - 150
Ethylbenzene	0.500	0.567		ug/L		113	50 - 150
Hexachlorobutadiene	0.500	0.790	^3+	ug/L		158	50 - 150
Isopropylbenzene	0.500	0.600		ug/L		120	50 - 150
m,p-Xylenes	1.00	1.09		ug/L		109	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.637		ug/L		127	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.574		ug/L		115	50 - 150
Naphthalene	0.500	0.853	^3+	ug/L		171	50 - 150
n-Butylbenzene	0.500	0.681		ug/L		136	50 - 150
N-Propylbenzene	0.500	0.611		ug/L		122	50 - 150
o-Chlorotoluene	0.500	0.578		ug/L		116	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.649		ug/L		130	50 - 150
o-Xylene	0.500	0.549		ug/L		110	50 - 150
p-Chlorotoluene	0.500	0.587		ug/L		117	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.651		ug/L		130	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MRL 380-130408/14

Matrix: Water

Analysis Batch: 130408

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
p-Isopropyltoluene	0.500	0.636		ug/L		127	50 - 150
sec-Butylbenzene	0.500	0.614		ug/L		123	50 - 150
Styrene	0.500	0.490	J	ug/L		98	50 - 150
Tert-amyl methyl ether	0.500	0.554	J	ug/L		111	50 - 150
Tert-butyl ethyl ether	0.500	0.557	J	ug/L		111	50 - 150
tert-Butylbenzene	0.500	0.609		ug/L		122	50 - 150
Tetrachloroethene (PCE)	0.500	0.511		ug/L		102	50 - 150
Toluene	0.500	0.554		ug/L		111	50 - 150
trans-1,2-Dichloroethylene	0.500	0.528		ug/L		106	50 - 150
trans-1,3-Dichloropropene	0.500	0.335	J	ug/L		67	50 - 150
Trichloroethylene (TCE)	0.500	0.476	J	ug/L		95	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.596		ug/L		119	50 - 150
Trichlorotrifluoroethane	0.500	0.595		ug/L		119	50 - 150
Vinyl Chloride (VC)	0.500	0.591		ug/L		118	50 - 150
Xylenes, Total	1.50	1.64		ug/L		109	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 380-129749/11

Matrix: Water

Analysis Batch: 129749

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			01/23/25 00:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/23/25 00:15	1
4-Bromofluorobenzene (Surr)	102		70 - 130		01/23/25 00:15	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		01/23/25 00:15	1

Lab Sample ID: LCS 380-129749/8

Matrix: Water

Analysis Batch: 129749

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Tertiary Butyl Alcohol (TBA)	5.00	4.84		ug/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 524.2 - Volatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 380-129749/9

Matrix: Water

Analysis Batch: 129749

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
Tertiary Butyl Alcohol (TBA)	5.00	4.35		ug/L		87	70 - 130	11	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Toluene-d8 (Surr)	103		70 - 130						
4-Bromofluorobenzene (Surr)	100		70 - 130						
1,2-Dichloroethane-d4 (Surr)	96		70 - 130						

Lab Sample ID: MRL 380-129749/10

Matrix: Water

Analysis Batch: 129749

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	MRL	MRL				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Tertiary Butyl Alcohol (TBA)			2.00	1.86	J	ug/L	-	93	50 - 150		
Surrogate	MRL	MRL									
	%Recovery	Qualifier	Limits								
Toluene-d8 (Surr)	104		50 - 150								
4-Bromofluorobenzene (Surr)	98		50 - 150								
1,2-Dichloroethane-d4 (Surr)	97		50 - 150								

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

Lab Sample ID: MB 380-129273/21-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129273

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4'-DDE	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4'-DDT	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDD	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDE	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDT	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Acenaphthene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Acenaphthylene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Acetochlor	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Alachlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
alpha-BHC	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
alpha-Chlordane	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Anthracene	<0.020		0.020	ug/L		01/21/25 06:08	01/21/25 16:26	1
Atrazine	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Benz(a)anthracene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[a]pyrene	<0.020		0.020	ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		01/21/25 06:08	01/21/25 16:26	1
beta-BHC	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MB 380-129273/21-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129273

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		01/21/25 06:08	01/21/25 16:26	1
Aldrin	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Bromacil	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Butachlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Butylbenzylphthalate	<0.50		0.50	ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorobenzilate	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Chloroneb	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorpyrifos	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Chrysene	<0.020		0.020	ug/L		01/21/25 06:08	01/21/25 16:26	1
delta-BHC	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		01/21/25 06:08	01/21/25 16:26	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Dieldrin	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Diethylphthalate	<0.50		0.50	ug/L		01/21/25 06:08	01/21/25 16:26	1
Dimethylphthalate	<0.50		0.50	ug/L		01/21/25 06:08	01/21/25 16:26	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		01/21/25 06:08	01/21/25 16:26	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan sulfate	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Endrin	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Endrin aldehyde	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
EPTC	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Fluoranthene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Fluorene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
gamma-BHC (Lindane)	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
gamma-Chlordane	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Heptachlor	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Hexachlorobenzene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Isophorone	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Malathion	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Methoxychlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Metolachlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Molinate	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Naphthalene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Parathion	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Phenanthrene	<0.040		0.040	ug/L		01/21/25 06:08	01/21/25 16:26	1
Propachlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Pyrene	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Simazine	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Terbacil	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Terbutylazine	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
Thiobencarb	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MB 380-129273/21-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129273

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		01/21/25 06:08	01/21/25 16:26	1
trans-Nonachlor	<0.050		0.050	ug/L		01/21/25 06:08	01/21/25 16:26	1
Trifluralin	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
1-Methylnaphthalene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1
2-Methylnaphthalene	<0.099		0.099	ug/L		01/21/25 06:08	01/21/25 16:26	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.511	T J	ug/L		11.21	N/A	01/21/25 06:08	01/21/25 16:26	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	01/21/25 06:08	01/21/25 16:26	1
Perylene-d12	88		70 - 130	01/21/25 06:08	01/21/25 16:26	1
Triphenylphosphate	103		70 - 130	01/21/25 06:08	01/21/25 16:26	1

Lab Sample ID: LCS 380-129273/23-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	1.99	2.11		ug/L		106	70 - 130
2,4'-DDE	1.99	2.02		ug/L		102	70 - 130
2,4'-DDT	1.99	2.02		ug/L		102	70 - 130
2,4-Dinitrotoluene	1.99	2.09		ug/L		105	70 - 130
2,6-Dinitrotoluene	1.99	1.97		ug/L		99	70 - 130
4,4'-DDD	1.99	2.12		ug/L		107	70 - 130
4,4'-DDE	1.99	1.98		ug/L		100	70 - 130
4,4'-DDT	1.99	2.07		ug/L		104	70 - 130
Acenaphthene	1.99	1.86		ug/L		94	70 - 130
Acenaphthylene	1.99	1.83		ug/L		92	70 - 130
Acetochlor	1.99	2.07		ug/L		104	70 - 130
Alachlor	1.99	1.99		ug/L		100	70 - 130
alpha-BHC	1.99	1.96		ug/L		99	70 - 130
alpha-Chlordane	1.99	2.06		ug/L		104	70 - 130
Anthracene	1.99	1.73		ug/L		87	70 - 130
Atrazine	1.99	2.05		ug/L		103	70 - 130
Benz(a)anthracene	1.99	1.97		ug/L		99	70 - 130
Benzo[a]pyrene	1.99	1.79		ug/L		90	70 - 130
Benzo[b]fluoranthene	1.99	1.88		ug/L		95	70 - 130
Benzo[g,h,i]perylene	1.99	1.88		ug/L		95	70 - 130
Benzo[k]fluoranthene	1.99	1.94		ug/L		98	70 - 130
beta-BHC	1.99	2.14		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	1.89		ug/L		95	70 - 130
Aldrin	1.99	1.72		ug/L		87	70 - 130
Bromacil	1.99	2.10		ug/L		106	70 - 130
Butachlor	1.99	2.10		ug/L		106	70 - 130
Butylbenzylphthalate	1.99	2.11		ug/L		106	70 - 130
Chlorobenzilate	1.99	1.87		ug/L		94	70 - 130
Chloroneb	1.99	2.07		ug/L		104	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: LCS 380-129273/23-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorothalonil (Draconil, Bravo)	1.99	2.03		ug/L		102	70 - 130
Chlorpyrifos	1.99	2.04		ug/L		103	70 - 130
Chrysene	1.99	1.94		ug/L		97	70 - 130
delta-BHC	1.99	2.00		ug/L		101	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.01		ug/L		101	70 - 130
Dibenz(a,h)anthracene	1.99	1.88		ug/L		95	70 - 130
Diclorvos (DDVP)	1.99	1.80		ug/L		91	70 - 130
Dieldrin	1.99	1.90		ug/L		95	70 - 130
Diethylphthalate	1.99	2.03		ug/L		102	70 - 130
Dimethylphthalate	1.99	1.96		ug/L		99	70 - 130
Di-n-butyl phthalate	3.97	4.07		ug/L		103	70 - 130
Di-n-octyl phthalate	1.99	1.71		ug/L		86	70 - 130
Endosulfan I (Alpha)	1.99	1.95		ug/L		98	70 - 130
Endosulfan II (Beta)	1.99	2.11		ug/L		106	70 - 130
Endosulfan sulfate	1.99	2.01		ug/L		101	70 - 130
Endrin	1.99	2.32		ug/L		117	70 - 130
Endrin aldehyde	1.99	1.92		ug/L		97	60 - 130
EPTC	1.99	1.84		ug/L		93	70 - 130
Fluoranthene	1.99	2.06		ug/L		104	70 - 130
Fluorene	1.99	1.95		ug/L		98	70 - 130
gamma-BHC (Lindane)	1.99	2.04		ug/L		103	70 - 130
gamma-Chlordane	1.99	2.00		ug/L		101	70 - 130
Heptachlor	1.99	2.00		ug/L		101	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.01		ug/L		101	70 - 130
Hexachlorobenzene	1.99	1.89		ug/L		95	70 - 130
Hexachlorocyclopentadiene	1.99	1.97		ug/L		99	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	1.76		ug/L		89	70 - 130
Isophorone	1.99	1.61		ug/L		81	70 - 130
Malathion	1.99	2.07		ug/L		104	70 - 130
Methoxychlor	1.99	1.94		ug/L		98	70 - 130
Metolachlor	1.99	2.02		ug/L		102	70 - 130
Molinate	1.99	1.95		ug/L		98	70 - 130
Naphthalene	1.99	1.81		ug/L		91	70 - 130
Parathion	1.99	2.13		ug/L		107	70 - 130
Pendimethalin (Penoxaline)	1.99	2.09		ug/L		105	70 - 130
Phenanthrene	1.99	1.80		ug/L		91	70 - 130
Propachlor	1.99	2.08		ug/L		105	70 - 130
Pyrene	1.99	2.04		ug/L		103	70 - 130
Simazine	1.99	1.98		ug/L		100	70 - 130
Terbacil	1.99	2.09		ug/L		105	70 - 130
Terbutylazine	1.99	2.30		ug/L		116	70 - 130
Thiobencarb	1.99	2.08		ug/L		105	70 - 130
trans-Nonachlor	1.99	1.95		ug/L		98	70 - 130
Trifluralin	1.99	1.87		ug/L		94	70 - 130
1-Methylnaphthalene	1.99	1.81		ug/L		91	70 - 130
2-Methylnaphthalene	1.99	1.80		ug/L		90	70 - 130

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: LCS 380-129273/23-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129273

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	110		70 - 130

Lab Sample ID: MRL 380-129273/22-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0993	0.0932	J	ug/L		94	50 - 150
2,4'-DDE	0.0993	0.0993		ug/L		100	50 - 150
2,4'-DDT	0.0993	0.112		ug/L		113	50 - 150
2,4-Dinitrotoluene	0.0993	0.119		ug/L		120	50 - 150
2,6-Dinitrotoluene	0.0993	0.131		ug/L		132	50 - 150
4,4'-DDD	0.0993	0.107		ug/L		107	50 - 150
4,4'-DDE	0.0993	0.0948	J	ug/L		96	50 - 150
4,4'-DDT	0.0993	0.114		ug/L		115	50 - 150
Acenaphthene	0.0993	0.0921	J	ug/L		93	50 - 150
Acenaphthylene	0.0993	0.0888	J	ug/L		89	50 - 150
Acetochlor	0.0993	0.120		ug/L		120	50 - 150
Alachlor	0.0496	0.0657		ug/L		132	50 - 150
alpha-BHC	0.0993	0.106		ug/L		107	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		91	50 - 150
Anthracene	0.0199	0.0201		ug/L		101	50 - 150
Atrazine	0.0496	0.0646		ug/L		130	50 - 150
Benz(a)anthracene	0.0496	0.0521		ug/L		105	50 - 150
Benzo[a]pyrene	0.0199	0.0154	J	ug/L		77	50 - 150
Benzo[b]fluoranthene	0.0199	0.0170	J	ug/L		86	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0415	J	ug/L		84	50 - 150
Benzo[k]fluoranthene	0.0199	0.0179	J	ug/L		90	50 - 150
beta-BHC	0.0993	0.120		ug/L		121	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.488	J	ug/L		82	50 - 150
Aldrin	0.00993	0.0104		ug/L		105	50 - 150
Bromacil	0.0993	0.107		ug/L		108	50 - 150
Butachlor	0.0496	0.0687		ug/L		138	50 - 150
Butylbenzylphthalate	0.496	0.530		ug/L		107	50 - 150
Chlorobenzilate	0.0993	0.105		ug/L		106	50 - 150
Chloroneb	0.0993	0.0791	J	ug/L		80	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0993	0.0921	J	ug/L		93	50 - 150
Chlorpyrifos	0.0496	0.0482	J	ug/L		97	50 - 150
Chrysene	0.0199	0.0208		ug/L		105	50 - 150
delta-BHC	0.0993	0.108		ug/L		109	50 - 150
Di(2-ethylhexyl)adipate	0.596	0.559	J	ug/L		94	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0402	J	ug/L		81	50 - 150
Diclorvos (DDVP)	0.0496	0.0554		ug/L		112	50 - 150
Dieldrin	0.00993	0.0124		ug/L		124	50 - 150
Diethylphthalate	0.496	0.525		ug/L		106	50 - 150
Dimethylphthalate	0.496	0.521		ug/L		105	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MRL 380-129273/22-A

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	0.496	0.513	J	ug/L		103	49 - 243
Di-n-octyl phthalate	0.0993	0.0787	J	ug/L		79	50 - 150
Endosulfan I (Alpha)	0.0993	0.0858	J	ug/L		86	50 - 150
Endosulfan II (Beta)	0.0993	0.121		ug/L		122	50 - 150
Endosulfan sulfate	0.0993	0.102		ug/L		103	50 - 150
Endrin	0.00993	0.0135		ug/L		136	50 - 150
Endrin aldehyde	0.0993	0.0975	J	ug/L		98	50 - 150
EPTC	0.0993	0.0907	J	ug/L		91	50 - 150
Fluoranthene	0.0993	0.0991		ug/L		100	50 - 150
Fluorene	0.0496	0.0507		ug/L		102	50 - 150
gamma-BHC (Lindane)	0.00993	0.00979	J	ug/L		99	50 - 150
gamma-Chlordane	0.0248	0.0229	J	ug/L		92	50 - 150
Heptachlor	0.00993	0.00897	J	ug/L		90	50 - 150
Heptachlor epoxide (isomer B)	0.00993	0.0109		ug/L		110	50 - 150
Hexachlorobenzene	0.0496	0.0471	J	ug/L		95	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0463	J	ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0408	J	ug/L		82	50 - 150
Isophorone	0.0993	0.102		ug/L		103	50 - 150
Malathion	0.0993	0.116		ug/L		117	50 - 150
Methoxychlor	0.0496	0.0666		ug/L		134	50 - 150
Metolachlor	0.0496	0.0676		ug/L		136	50 - 150
Molinate	0.0993	0.102		ug/L		103	50 - 150
Naphthalene	0.0993	0.0967	J	ug/L		97	50 - 150
Parathion	0.0993	0.0997		ug/L		100	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.104		ug/L		105	50 - 150
Phenanthrene	0.0397	0.0420		ug/L		106	50 - 150
Propachlor	0.0496	0.0532		ug/L		107	50 - 150
Pyrene	0.0496	0.0480	J	ug/L		97	50 - 150
Simazine	0.0496	0.0518		ug/L		104	50 - 150
Terbacil	0.0993	0.111		ug/L		112	50 - 150
Terbutylazine	0.0993	0.105		ug/L		106	50 - 150
Thiobencarb	0.0993	0.0996		ug/L		100	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		96	50 - 150
Trifluralin	0.0993	0.105		ug/L		106	50 - 150
1-Methylnaphthalene	0.0993	0.106		ug/L		107	50 - 150
2-Methylnaphthalene	0.0993	0.101		ug/L		102	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	85		70 - 130
Triphenylphosphate	102		70 - 130

Lab Sample ID: 380-131022-AC-1-A MS

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	<0.099		1.94	2.16		ug/L		111	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-131022-AC-1-A MS

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDE	<0.099		1.94	2.05		ug/L		106	70 - 130
2,4'-DDT	<0.099		1.94	2.09		ug/L		108	70 - 130
2,4-Dinitrotoluene	<0.099		1.94	2.31		ug/L		119	70 - 130
2,6-Dinitrotoluene	<0.099		1.94	2.16		ug/L		111	70 - 130
4,4'-DDD	<0.099		1.94	2.17		ug/L		112	70 - 130
4,4'-DDE	<0.099		1.94	2.01		ug/L		104	70 - 130
4,4'-DDT	<0.099		1.94	2.16		ug/L		111	70 - 130
Acenaphthene	<0.099		1.94	1.92		ug/L		99	70 - 130
Acenaphthylene	<0.099		1.94	1.90		ug/L		98	70 - 130
Acetochlor	<0.099		1.94	2.11		ug/L		108	70 - 130
Alachlor	<0.049		1.94	2.06		ug/L		106	70 - 130
alpha-BHC	<0.099		1.94	2.03		ug/L		105	70 - 130
alpha-Chlordane	<0.049		1.94	2.14		ug/L		110	70 - 130
Anthracene	<0.020		1.94	1.43		ug/L		74	70 - 130
Atrazine	<0.049		1.94	2.11		ug/L		109	70 - 130
Benz(a)anthracene	<0.049		1.94	1.96		ug/L		101	70 - 130
Benzo[a]pyrene	<0.020		1.94	1.73		ug/L		89	70 - 130
Benzo[b]fluoranthene	<0.020		1.94	1.97		ug/L		101	70 - 130
Benzo[g,h,i]perylene	<0.049		1.94	1.93		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.020		1.94	2.02		ug/L		104	70 - 130
beta-BHC	<0.099		1.94	2.17		ug/L		112	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.94	1.79		ug/L		92	70 - 130
Aldrin	<0.0099		1.94	1.74		ug/L		90	70 - 130
Bromacil	<0.099		1.94	2.28		ug/L		118	70 - 130
Butachlor	<0.049		1.94	2.13		ug/L		110	70 - 130
Butylbenzylphthalate	<0.49		1.94	2.12		ug/L		109	70 - 130
Chlorobenzilate	<0.099		1.94	1.90		ug/L		98	70 - 130
Chloroneb	<0.099		1.94	2.10		ug/L		108	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.94	2.14		ug/L		110	70 - 130
Chlorpyrifos	<0.049		1.94	2.12		ug/L		109	70 - 130
Chrysene	<0.020		1.94	1.98		ug/L		102	70 - 130
delta-BHC	<0.099		1.94	2.04		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.94	1.95		ug/L		101	70 - 130
Dibenz(a,h)anthracene	<0.049		1.94	1.91		ug/L		99	70 - 130
Diclorvos (DDVP)	<0.049		1.94	1.91		ug/L		99	70 - 130
Dieldrin	<0.0099		1.94	1.96		ug/L		101	70 - 130
Diethylphthalate	<0.49		1.94	2.05		ug/L		106	70 - 130
Dimethylphthalate	<0.49		1.94	1.99		ug/L		103	70 - 130
Di-n-butyl phthalate	<0.99		3.88	4.16		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.099		1.94	1.60		ug/L		82	70 - 130
Endosulfan I (Alpha)	<0.099		1.94	2.01		ug/L		104	70 - 130
Endosulfan II (Beta)	<0.099		1.94	2.13		ug/L		110	70 - 130
Endosulfan sulfate	<0.099		1.94	2.11		ug/L		109	70 - 130
Endrin	<0.0099		1.94	2.38		ug/L		123	70 - 130
Endrin aldehyde	<0.099		1.94	1.71		ug/L		88	60 - 130
EPTC	<0.099		1.94	1.89		ug/L		97	70 - 130
Fluoranthene	<0.099		1.94	2.12		ug/L		109	70 - 130
Fluorene	<0.049		1.94	1.97		ug/L		102	70 - 130
gamma-BHC (Lindane)	<0.0099		1.94	2.06		ug/L		106	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-131022-AC-1-A MS

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
gamma-Chlordane	<0.049		1.94	2.07		ug/L		106	70 - 130
Heptachlor	<0.0099		1.94	2.05		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	<0.0099		1.94	2.07		ug/L		107	70 - 130
Hexachlorobenzene	<0.049		1.94	1.93		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.049		1.94	2.05		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.94	1.94		ug/L		100	70 - 130
Isophorone	<0.099		1.94	1.67		ug/L		86	70 - 130
Malathion	<0.099		1.94	2.12		ug/L		109	70 - 130
Methoxychlor	<0.049		1.94	2.06		ug/L		106	70 - 130
Metolachlor	<0.049		1.94	2.09		ug/L		108	70 - 130
Molinate	<0.099		1.94	2.00		ug/L		103	70 - 130
Naphthalene	<0.099		1.94	1.87		ug/L		96	70 - 130
Parathion	<0.099		1.94	2.25		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.94	2.26		ug/L		117	70 - 130
Phenanthrene	<0.040		1.94	1.83		ug/L		94	70 - 130
Propachlor	<0.049		1.94	2.11		ug/L		109	70 - 130
Pyrene	<0.049		1.94	2.08		ug/L		107	70 - 130
Simazine	<0.049		1.94	2.04		ug/L		105	70 - 130
Terbacil	<0.099		1.94	2.26		ug/L		116	70 - 130
Terbutylazine	<0.099		1.94	2.30		ug/L		118	70 - 130
Thiobencarb	<0.099		1.94	2.11		ug/L		109	70 - 130
trans-Nonachlor	<0.049		1.94	2.04		ug/L		105	70 - 130
Trifluralin	<0.099		1.94	1.99		ug/L		103	70 - 130
1-Methylnaphthalene	<0.099		1.94	1.84		ug/L		95	70 - 130
2-Methylnaphthalene	<0.099		1.94	1.83		ug/L		94	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	109		70 - 130

Lab Sample ID: 380-131022-AD-1-A MSD

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
2,4'-DDE	<0.099		1.96	2.05		ug/L		105	70 - 130	0	20
2,4'-DDT	<0.099		1.96	2.13		ug/L		108	70 - 130	2	20
2,4-Dinitrotoluene	<0.099		1.96	2.32		ug/L		118	70 - 130	1	20
2,6-Dinitrotoluene	<0.099		1.96	2.15		ug/L		109	70 - 130	0	20
4,4'-DDD	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
4,4'-DDE	<0.099		1.96	2.03		ug/L		104	70 - 130	1	20
4,4'-DDT	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
Acenaphthene	<0.099		1.96	1.95		ug/L		99	70 - 130	1	20
Acenaphthylene	<0.099		1.96	1.91		ug/L		97	70 - 130	0	20
Acetochlor	<0.099		1.96	2.14		ug/L		109	70 - 130	2	20
Alachlor	<0.049		1.96	2.07		ug/L		105	70 - 130	1	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-131022-AD-1-A MSD

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	<0.099		1.96	2.05		ug/L		104	70 - 130	1	20
alpha-Chlordane	<0.049		1.96	2.14		ug/L		109	70 - 130	0	20
Anthracene	<0.020		1.96	1.45		ug/L		74	70 - 130	1	20
Atrazine	<0.049		1.96	2.16		ug/L		110	70 - 130	2	20
Benz(a)anthracene	<0.049		1.96	2.00		ug/L		102	70 - 130	2	20
Benzo[a]pyrene	<0.020		1.96	1.77		ug/L		90	70 - 130	2	20
Benzo[b]fluoranthene	<0.020		1.96	1.98		ug/L		101	70 - 130	1	20
Benzo[g,h,i]perylene	<0.049		1.96	1.96		ug/L		100	70 - 130	1	20
Benzo[k]fluoranthene	<0.020		1.96	2.06		ug/L		105	70 - 130	2	20
beta-BHC	<0.099		1.96	2.23		ug/L		113	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.68		ug/L		86	70 - 130	6	20
Aldrin	<0.0099		1.96	1.74		ug/L		88	70 - 130	0	20
Bromacil	<0.099		1.96	2.29		ug/L		117	70 - 130	0	20
Butachlor	<0.049		1.96	2.18		ug/L		111	70 - 130	2	20
Butylbenzylphthalate	<0.49		1.96	2.17		ug/L		111	70 - 130	2	20
Chlorobenzilate	<0.099		1.96	1.80		ug/L		92	70 - 130	5	20
Chloroneb	<0.099		1.96	2.17		ug/L		111	70 - 130	3	20
Chlorothalonil (Draconil, Bravo)	<0.099		1.96	2.11		ug/L		108	70 - 130	1	20
Chlorpyrifos	<0.049		1.96	2.12		ug/L		108	70 - 130	0	20
Chrysene	<0.020		1.96	1.99		ug/L		102	70 - 130	1	20
delta-BHC	<0.099		1.96	2.08		ug/L		106	70 - 130	2	20
Di(2-ethylhexyl)adipate	<0.59		1.96	1.86		ug/L		95	70 - 130	5	20
Dibenz(a,h)anthracene	<0.049		1.96	1.92		ug/L		98	70 - 130	0	20
Diclorvos (DDVP)	<0.049		1.96	1.90		ug/L		97	70 - 130	1	20
Dieldrin	<0.0099		1.96	1.97		ug/L		100	70 - 130	1	20
Diethylphthalate	<0.49		1.96	2.08		ug/L		106	70 - 130	1	20
Dimethylphthalate	<0.49		1.96	2.01		ug/L		102	70 - 130	1	20
Di-n-butyl phthalate	<0.99		3.93	4.19		ug/L		107	70 - 130	1	20
Di-n-octyl phthalate	<0.099		1.96	1.47		ug/L		75	70 - 130	8	20
Endosulfan I (Alpha)	<0.099		1.96	2.04		ug/L		104	70 - 130	2	20
Endosulfan II (Beta)	<0.099		1.96	2.09		ug/L		107	70 - 130	2	20
Endosulfan sulfate	<0.099		1.96	2.16		ug/L		110	70 - 130	2	20
Endrin	<0.0099		1.96	2.45		ug/L		125	70 - 130	3	20
Endrin aldehyde	<0.099		1.96	1.76		ug/L		89	60 - 130	2	20
EPTC	<0.099		1.96	1.90		ug/L		97	70 - 130	0	20
Fluoranthene	<0.099		1.96	2.13		ug/L		109	70 - 130	1	20
Fluorene	<0.049		1.96	2.01		ug/L		102	70 - 130	2	20
gamma-BHC (Lindane)	<0.0099		1.96	2.13		ug/L		108	70 - 130	3	20
gamma-Chlordane	<0.049		1.96	2.06		ug/L		105	70 - 130	0	20
Heptachlor	<0.0099		1.96	2.03		ug/L		103	70 - 130	1	20
Heptachlor epoxide (isomer B)	<0.0099		1.96	2.09		ug/L		107	70 - 130	1	20
Hexachlorobenzene	<0.049		1.96	1.98		ug/L		101	70 - 130	3	20
Hexachlorocyclopentadiene	<0.049		1.96	2.07		ug/L		105	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.96		ug/L		100	70 - 130	1	20
Isophorone	<0.099		1.96	1.76		ug/L		90	70 - 130	5	20
Malathion	<0.099		1.96	2.16		ug/L		110	70 - 130	2	20
Methoxychlor	<0.049		1.96	2.06		ug/L		105	70 - 130	0	20
Metolachlor	<0.049		1.96	2.11		ug/L		107	70 - 130	1	20
Molinate	<0.099		1.96	2.01		ug/L		102	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-131022-AD-1-A MSD

Matrix: Water

Analysis Batch: 129391

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Naphthalene	<0.099		1.96	1.87		ug/L		95	70 - 130	0	20
Parathion	<0.099		1.96	2.27		ug/L		116	70 - 130	1	20
Pendimethalin (Penoxaline)	<0.099		1.96	2.31		ug/L		118	70 - 130	2	20
Phenanthrene	<0.040		1.96	1.84		ug/L		94	70 - 130	1	20
Propachlor	<0.049		1.96	2.14		ug/L		109	70 - 130	1	20
Pyrene	<0.049		1.96	2.13		ug/L		108	70 - 130	2	20
Simazine	<0.049		1.96	2.09		ug/L		107	70 - 130	2	20
Terbacil	<0.099		1.96	2.22		ug/L		113	70 - 130	2	20
Terbuthylazine	<0.099		1.96	2.37		ug/L		121	70 - 130	3	20
Thiobencarb	<0.099		1.96	2.14		ug/L		109	70 - 130	1	20
trans-Nonachlor	<0.049		1.96	2.04		ug/L		104	70 - 130	0	20
Trifluralin	<0.099		1.96	2.05		ug/L		104	70 - 130	3	20
1-Methylnaphthalene	<0.099		1.96	1.86		ug/L		95	70 - 130	1	20
2-Methylnaphthalene	<0.099		1.96	1.85		ug/L		94	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
2-Nitro-m-xylene	98		70 - 130								
Perylene-d12	97		70 - 130								
Triphenylphosphate	110		70 - 130								

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

Lab Sample ID: MB 570-524601/1-A

Matrix: Water

Analysis Batch: 526704

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 524601

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	01/20/25 13:18	01/27/25 14:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		33 - 139				01/20/25 13:18	01/27/25 14:51	1
2-Fluorobiphenyl (Surr)	54		33 - 126				01/20/25 13:18	01/27/25 14:51	1
2-Fluorophenol (Surr)	51		12 - 120				01/20/25 13:18	01/27/25 14:51	1
Nitrobenzene-d5 (Surr)	63		36 - 120				01/20/25 13:18	01/27/25 14:51	1
Phenol-d6 (Surr)	31		10 - 120				01/20/25 13:18	01/27/25 14:51	1
p-Terphenyl-d14 (Surr)	65		47 - 131				01/20/25 13:18	01/27/25 14:51	1

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

Lab Sample ID: MB 570-524601/1-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 524601

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
2,4,5-Trichlorophenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2,4-Dichlorophenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MB 570-524601/1-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 524601

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2,6-Dichlorophenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Chloronaphthalene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Chlorophenol	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Methylnaphthalene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Methylphenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Nitroaniline	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Nitrophenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
3/4-Methylphenol	<2.0		2.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
3-Nitroaniline	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
4,6-Dinitro-2-methylphenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Bromophenyl phenyl ether	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Chloro-3-methylphenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Chloroaniline	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Chlorophenyl phenyl ether	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Nitroaniline	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
4-Nitrophenol	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
Acenaphthene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Acenaphthylene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Aniline	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Anthracene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzidine	<5.0		5.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[a]anthracene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[a]pyrene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzoic acid	<10		10	ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzyl alcohol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
Bis(2-chloroethoxy)methane	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Bis(2-chloroethyl)ether	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
bis (2-Chloroisopropyl) ether	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Chrysene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Dibenzofuran	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Fluoranthene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Fluorene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Hexachloroethane	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Naphthalene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Nitrobenzene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
N-Nitrosodi-n-propylamine	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
N-Nitrosodiphenylamine	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Pentachlorophenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
Phenanthrene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1
Phenol	<1.0		1.0	ug/L		01/20/25 13:18	01/29/25 14:16	1
Pyrene	<0.20		0.20	ug/L		01/20/25 13:18	01/29/25 14:16	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MB 570-524601/1-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 524601

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	91		28 - 127	01/20/25 13:18	01/29/25 14:16	1
2-Fluorobiphenyl (Surr)	57		31 - 120	01/20/25 13:18	01/29/25 14:16	1
2-Fluorophenol (Surr)	44		17 - 120	01/20/25 13:18	01/29/25 14:16	1
Nitrobenzene-d5 (Surr)	62		27 - 120	01/20/25 13:18	01/29/25 14:16	1
Phenol-d6 (Surr)	28		10 - 120	01/20/25 13:18	01/29/25 14:16	1
p-Terphenyl-d14 (Surr)	68		45 - 120	01/20/25 13:18	01/29/25 14:16	1

Lab Sample ID: LCS 570-524601/2-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 524601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	13.5		ug/L		68	47 - 120
2,4,5-Trichlorophenol	20.0	17.1		ug/L		85	57 - 120
2,4,6-Trichlorophenol	20.0	17.3		ug/L		87	52 - 129
2,4-Dichlorophenol	20.0	15.6		ug/L		78	53 - 122
2,4-Dinitrophenol	20.0	14.7		ug/L		74	1 - 173
2,6-Dichlorophenol	20.0	15.9		ug/L		79	50 - 120
2-Chloronaphthalene	20.0	15.9		ug/L		79	65 - 120
2-Chlorophenol	20.0	16.9		ug/L		85	36 - 120
2-Methylnaphthalene	20.0	14.9		ug/L		74	43 - 120
2-Methylphenol	20.0	15.8		ug/L		79	46 - 120
2-Nitroaniline	20.0	16.6		ug/L		83	51 - 125
2-Nitrophenol	20.0	14.1		ug/L		71	45 - 167
3/4-Methylphenol	40.0	28.9		ug/L		72	29 - 120
3-Nitroaniline	20.0	16.6		ug/L		83	62 - 129
4,6-Dinitro-2-methylphenol	20.0	17.6		ug/L		88	53 - 130
4-Bromophenyl phenyl ether	20.0	16.0		ug/L		80	65 - 120
4-Chloro-3-methylphenol	20.0	15.8		ug/L		79	41 - 128
4-Chloroaniline	20.0	13.2		ug/L		66	51 - 120
4-Chlorophenyl phenyl ether	20.0	17.1		ug/L		86	38 - 145
4-Nitroaniline	20.0	17.4		ug/L		87	64 - 129
4-Nitrophenol	20.0	8.25		ug/L		41	13 - 129
Acenaphthene	20.0	15.7		ug/L		78	60 - 132
Acenaphthylene	20.0	15.5		ug/L		78	54 - 126
Aniline	20.0	6.71	*-	ug/L		34	52 - 121
Anthracene	20.0	18.1		ug/L		91	43 - 120
Benzidine	20.0	<0.94	*-	ug/L		2	20 - 164
Benzo[a]anthracene	20.0	17.4		ug/L		87	42 - 133
Benzo[a]pyrene	20.0	18.3		ug/L		92	32 - 148
Benzo[b]fluoranthene	20.0	18.0		ug/L		90	42 - 140
Benzo[g,h,i]perylene	20.0	16.9		ug/L		84	1 - 195
Benzo[k]fluoranthene	20.0	17.8		ug/L		89	25 - 146
Benzoic acid	20.0	4.39	J	ug/L		22	20 - 120
Benzyl alcohol	20.0	14.3		ug/L		71	44 - 122
Bis(2-chloroethoxy)methane	20.0	15.3		ug/L		76	49 - 165
Bis(2-chloroethyl)ether	20.0	16.6		ug/L		83	43 - 126
bis (2-Chloroisopropyl) ether	20.0	15.4		ug/L		77	63 - 139

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: LCS 570-524601/2-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 524601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chrysene	20.0	17.0		ug/L		85	44 - 140
Dibenz(a,h)anthracene	20.0	17.4		ug/L		87	1 - 200
Dibenzofuran	20.0	16.9		ug/L		84	48 - 120
Fluoranthene	20.0	19.2		ug/L		96	43 - 121
Fluorene	20.0	17.2		ug/L		86	70 - 120
Hexachloroethane	20.0	12.2		ug/L		61	55 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.8		ug/L		89	1 - 151
Naphthalene	20.0	13.4		ug/L		67	36 - 120
Nitrobenzene	20.0	14.6		ug/L		73	54 - 158
N-Nitrosodi-n-propylamine	20.0	15.8		ug/L		79	14 - 198
N-Nitrosodiphenylamine	20.0	19.9		ug/L		99	65 - 133
Pentachlorophenol	20.0	17.2		ug/L		86	38 - 152
Phenanthrene	20.0	18.0		ug/L		90	65 - 120
Phenol	20.0	8.48		ug/L		42	17 - 120
Pyrene	20.0	17.8		ug/L		89	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	84		28 - 127
2-Fluorobiphenyl (Surr)	69		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	64		27 - 120
Phenol-d6 (Surr)	37		10 - 120
p-Terphenyl-d14 (Surr)	79		45 - 120

Lab Sample ID: LCSD 570-524601/3-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 524601

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	14.5		ug/L		73	47 - 120	7	20
2,4,5-Trichlorophenol	20.0	19.0		ug/L		95	57 - 120	11	20
2,4,6-Trichlorophenol	20.0	18.3		ug/L		91	52 - 129	5	35
2,4-Dichlorophenol	20.0	16.2		ug/L		81	53 - 122	4	30
2,4-Dinitrophenol	20.0	19.2		ug/L		96	1 - 173	26	79
2,6-Dichlorophenol	20.0	15.8		ug/L		79	50 - 120	1	20
2-Chloronaphthalene	20.0	17.6		ug/L		88	65 - 120	10	15
2-Chlorophenol	20.0	18.8		ug/L		94	36 - 120	10	37
2-Methylnaphthalene	20.0	16.5		ug/L		82	43 - 120	10	20
2-Methylphenol	20.0	18.2		ug/L		91	46 - 120	14	20
2-Nitroaniline	20.0	17.2		ug/L		86	51 - 125	3	20
2-Nitrophenol	20.0	15.1		ug/L		75	45 - 167	7	33
3/4-Methylphenol	40.0	31.1		ug/L		78	29 - 120	7	20
3-Nitroaniline	20.0	17.6		ug/L		88	62 - 129	6	20
4,6-Dinitro-2-methylphenol	20.0	17.9		ug/L		89	53 - 130	2	122
4-Bromophenyl phenyl ether	20.0	16.4		ug/L		82	65 - 120	3	26
4-Chloro-3-methylphenol	20.0	16.2		ug/L		81	41 - 128	3	44
4-Chloroaniline	20.0	14.5		ug/L		73	51 - 120	10	20
4-Chlorophenyl phenyl ether	20.0	18.7		ug/L		93	38 - 145	9	36

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: LCSD 570-524601/3-A

Matrix: Water

Analysis Batch: 527743

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 524601

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Nitroaniline	20.0	17.1		ug/L		86	64 - 129	1	20
4-Nitrophenol	20.0	8.62		ug/L		43	13 - 129	4	79
Acenaphthene	20.0	17.0		ug/L		85	60 - 132	8	29
Acenaphthylene	20.0	16.9		ug/L		85	54 - 126	9	45
Aniline	20.0	13.3	*1	ug/L		66	52 - 121	66	21
Anthracene	20.0	18.1		ug/L		91	43 - 120	0	40
Benzidine	20.0	<0.94	*- *1	ug/L		3	20 - 164	52	30
Benzo[a]anthracene	20.0	18.2		ug/L		91	42 - 133	4	32
Benzo[a]pyrene	20.0	19.2		ug/L		96	32 - 148	5	43
Benzo[b]fluoranthene	20.0	18.6		ug/L		93	42 - 140	4	43
Benzo[g,h,i]perylene	20.0	17.6		ug/L		88	1 - 195	4	61
Benzo[k]fluoranthene	20.0	18.4		ug/L		92	25 - 146	4	38
Benzoic acid	20.0	8.63	J *1	ug/L		43	20 - 120	65	30
Benzyl alcohol	20.0	15.8		ug/L		79	44 - 122	10	20
Bis(2-chloroethoxy)methane	20.0	16.0		ug/L		80	49 - 165	5	32
Bis(2-chloroethyl)ether	20.0	18.8		ug/L		94	43 - 126	12	65
bis (2-Chloroisopropyl) ether	20.0	17.6		ug/L		88	63 - 139	14	46
Chrysene	20.0	17.9		ug/L		89	44 - 140	5	53
Dibenz(a,h)anthracene	20.0	17.4		ug/L		87	1 - 200	0	75
Dibenzofuran	20.0	18.1		ug/L		90	48 - 120	7	20
Fluoranthene	20.0	19.6		ug/L		98	43 - 121	2	40
Fluorene	20.0	18.5		ug/L		93	70 - 120	8	23
Hexachloroethane	20.0	14.8		ug/L		74	55 - 120	20	32
Indeno[1,2,3-cd]pyrene	20.0	18.3		ug/L		91	1 - 151	3	60
Naphthalene	20.0	14.7		ug/L		73	36 - 120	9	39
Nitrobenzene	20.0	15.1		ug/L		76	54 - 158	3	37
N-Nitrosodi-n-propylamine	20.0	16.7		ug/L		84	14 - 198	6	52
N-Nitrosodiphenylamine	20.0	20.0		ug/L		100	65 - 133	0	20
Pentachlorophenol	20.0	17.1		ug/L		85	38 - 152	1	52
Phenanthrene	20.0	18.2		ug/L		91	65 - 120	1	24
Phenol	20.0	9.36		ug/L		47	17 - 120	10	39
Pyrene	20.0	18.8		ug/L		94	70 - 120	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		28 - 127
2-Fluorobiphenyl (Surr)	76		31 - 120
2-Fluorophenol (Surr)	59		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	39		10 - 120
p-Terphenyl-d14 (Surr)	82		45 - 120

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

Lab Sample ID: MB 570-525353/6

Matrix: Water

Analysis Batch: 525353

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			01/22/25 13:53	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		38 - 134		01/22/25 13:53	1

Lab Sample ID: LCS 570-525353/4

Matrix: Water

Analysis Batch: 525353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	410		ug/L		103	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		38 - 134

Lab Sample ID: LCSD 570-525353/5

Matrix: Water

Analysis Batch: 525353

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	411		ug/L		103	78 - 120	0	10

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		38 - 134

Lab Sample ID: MRL 570-525353/3

Matrix: Water

Analysis Batch: 525353

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	13.2		ug/L		132	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		38 - 134

Lab Sample ID: 380-130371-C-3 MS

Matrix: Water

Analysis Batch: 525353

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	429		ug/L		107	68 - 122

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		38 - 134

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-130371-C-3 MSD

Matrix: Water

Analysis Batch: 525353

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	433		ug/L		108	68 - 122	1	18
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	100		38 - 134								

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC)

Lab Sample ID: MBL 380-129115/4-A

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129115

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		01/20/25 19:00	01/21/25 00:47	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		01/20/25 19:00	01/21/25 00:47	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		01/20/25 19:00	01/21/25 00:47	1
Surrogate	%Recovery	MBL Qualifier	MBL Limits					
1,2-Dibromopropane (Surr)	101		60 - 140					
				Prepared	Analyzed	Dil Fac		
				01/20/25 19:00	01/21/25 00:47	1		

Lab Sample ID: LCS 380-129115/29-A

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129115

			Spike	LCS	LCS	%Rec			
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
1,2,3-Trichloropropane			0.200	0.212		ug/L		106	70 - 130
1,2-Dibromo-3-Chloropropane			0.200	0.200		ug/L		100	70 - 130
1,2-Dibromoethane			0.200	0.199		ug/L		99	70 - 130

Lab Sample ID: MRL 380-129115/2-A

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129115

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0205		ug/L		103	60 - 140		
Surrogate	MRL %Recovery	MRL Qualifier	Limits								
1,2-Dibromopropane (Surr)	102		60 - 140								

Lab Sample ID: MRL 380-129115/3-A

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129115

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane	0.0500	0.0503		ug/L		101	60 - 140		

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: MRL 380-129115/3-A

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129115

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.0100	0.0101		ug/L		101	60 - 140
1,2-Dibromoethane	0.0100	0.00994	J	ug/L		99	60 - 140

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dibromopropane (Surr)	90		60 - 140

Lab Sample ID: 380-130903-B-1-A MS

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129115

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.26	1.25		ug/L		99	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.253	0.250		ug/L		99	65 - 135
1,2-Dibromoethane	<0.010		0.253	0.222		ug/L		88	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dibromopropane (Surr)	104		60 - 140

Lab Sample ID: 380-130883-A-1-A DU

Matrix: Water

Analysis Batch: 129398

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 129115

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1,2,3-Trichloropropane	<0.020		<0.020		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.0099		<0.010		ug/L		NC	20
1,2-Dibromoethane	<0.0099		<0.010		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
1,2-Dibromopropane (Surr)	104		60 - 140

Lab Sample ID: MBL 380-129116/4-A

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129116

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		01/21/25 18:00	01/22/25 06:33	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		01/21/25 18:00	01/22/25 06:33	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		01/21/25 18:00	01/22/25 06:33	1

Surrogate	MBL %Recovery	MBL Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	95		60 - 140	01/21/25 18:00	01/22/25 06:33	1

Lab Sample ID: LCS 380-129116/29-A

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.200	0.212		ug/L		106	70 - 130

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 380-129116/29-A

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129116

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier				Limits		
1,2-Dibromo-3-Chloropropane			0.200	0.201		ug/L		100	70 - 130		
1,2-Dibromoethane			0.200	0.202		ug/L		101	70 - 130		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
1,2-Dibromopropane (Surr)	95		60 - 140								

Lab Sample ID: MRL 380-129116/2-A

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129116

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			0.0200	0.0200		ug/L		100	60 - 140		
Surrogate	MRL %Recovery	MRL Qualifier	Limits								
1,2-Dibromopropane (Surr)	96		60 - 140								

Lab Sample ID: MRL 380-129116/3-A

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129116

			Spike	MRL	MRL				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
1,2,3-Trichloropropane			0.0500	0.0528		ug/L		106	60 - 140		
1,2-Dibromo-3-Chloropropane			0.0100	0.0107		ug/L		107	60 - 140		
1,2-Dibromoethane			0.0100	0.0102		ug/L		102	60 - 140		
Surrogate	MRL	MRL									
	%Recovery	Qualifier	Limits								
1,2-Dibromopropane (Surr)	97		60 - 140								

Lab Sample ID: 380-130905-A-1-A MS

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane	<0.020		1.24	1.29		ug/L		103	65 - 135		
1,2-Dibromo-3-Chloropropane	<0.010		0.249	0.245		ug/L		99	65 - 135		
1,2-Dibromoethane	<0.010		0.249	0.258		ug/L		104	65 - 135		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1,2-Dibromopropane (Surr)	105		60 - 140								

Lab Sample ID: 380-130901-C-1-A DU

Matrix: Water

Analysis Batch: 129725

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 129116

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1,2,3-Trichloropropane	<0.020		<0.020		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.010		<0.010		ug/L		NC	20
1,2-Dibromoethane	<0.010		<0.010		ug/L		NC	20

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 504.1 - EDB, DBCP and 1,2,3-TCP (GC) (Continued)

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
1,2-Dibromopropane (Surr)	111		60 - 140

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MB 380-129069/3-A
Matrix: Water
Analysis Batch: 129392

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 129069

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.50		0.50	ug/L		01/20/25 12:06	01/20/25 20:09	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1016	<0.070		0.070	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1221	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1232	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1242	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1248	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1254	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1
PCB-1260	<0.070		0.070	ug/L		01/20/25 12:06	01/20/25 20:09	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		01/20/25 12:06	01/20/25 20:09	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	102		70 - 130	01/20/25 12:06	01/20/25 20:09	1
Tetrachloro-m-xylene	103		70 - 130	01/20/25 12:06	01/20/25 20:09	1

Lab Sample ID: LCS 380-129069/28-A
Matrix: Water
Analysis Batch: 129392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	2.50	2.61		ug/L		104	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	100		70 - 130

Lab Sample ID: LCS 380-129069/30-A
Matrix: Water
Analysis Batch: 129392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.500	0.520		ug/L		104	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	98		70 - 130

Lab Sample ID: LCS 380-129069/31-A
Matrix: Water
Analysis Batch: 129392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1221	0.500	0.392		ug/L		78	70 - 130

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

Lab Sample ID: LCS 380-129069/31-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129069

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
Tetrachloro-m-xylene	95		70 - 130

Lab Sample ID: LCS 380-129069/39-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	2.50	2.38		ug/L		95	70 - 130

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
Tetrachloro-m-xylene	99		70 - 130

Lab Sample ID: LCS 380-129069/47-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.500	0.477		ug/L		95	70 - 130

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
Tetrachloro-m-xylene	102		70 - 130

Lab Sample ID: LCSD 380-129069/29-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	2.50	2.64		ug/L		105	70 - 130	1	20

	LCSD %Recovery	LCSD Qualifier	Limits
Surrogate			
Tetrachloro-m-xylene	102		70 - 130

Lab Sample ID: MRL 380-129069/1-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	0.500	0.473	J	ug/L		95	50 - 150

	MRL %Recovery	MRL Qualifier	Limits
Surrogate			
Tetrachloro-m-xylene	100		70 - 130

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 505 - Organochlorine Pesticides/PCBs (GC) (Continued)

Lab Sample ID: MRL 380-129069/2-A

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129069

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)			0.100	0.0891	J	ug/L		89	50 - 150
Surrogate	%Recovery	MRL Qualifier	Limits						
Tetrachloro-m-xylene	95		70 - 130						

Lab Sample ID: 380-130863-C-1-A MS

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.46	2.26		ug/L		92	65 - 135
Surrogate	%Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	96		70 - 130						

Lab Sample ID: 380-130863-D-1-A MS

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	<0.10		0.494	0.480		ug/L		97	65 - 135
Surrogate	%Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	106		70 - 130						

Lab Sample ID: 380-130864-B-1-A MS

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.48	2.40		ug/L		97	65 - 135
Surrogate	%Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	97		70 - 130						

Lab Sample ID: 380-130864-C-1-A MS

Matrix: Water

Analysis Batch: 129392

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 129069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	<0.10		0.496	0.477		ug/L		96	65 - 135
Surrogate	%Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	100		70 - 130						

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: MB 570-524661/1-A

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 524661

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		01/20/25 15:08	01/27/25 23:48	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		01/20/25 15:08	01/27/25 23:48	1
C8-C18	<25		25	ug/L		01/20/25 15:08	01/27/25 23:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	85		60 - 130			01/20/25 15:08	01/27/25 23:48	1

Lab Sample ID: LCS 570-524661/2-A

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 524661

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1470		ug/L		92	56 - 127
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
n-Octacosane (Surr)	86		60 - 130				

Lab Sample ID: LCSD 570-524661/3-A

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 524661

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1500		ug/L		93	56 - 127	2	23
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
n-Octacosane (Surr)	88		60 - 130						

Lab Sample ID: MRL 570-524661/4-A

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 524661

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	0.0287		mg/L		144	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
n-Octacosane (Surr)	90		60 - 130				

Lab Sample ID: 380-130371-B-3-A MS

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 524661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<19		1640	1590		ug/L		97	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
n-Octacosane (Surr)	112		60 - 130						

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

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

Lab Sample ID: 380-130371-B-3-B MSD

Matrix: Water

Analysis Batch: 526993

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 524661

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<19		1620	1540		ug/L		95	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
n-Octacosane (Surr)	89		60 - 130								

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC)

Lab Sample ID: MB 570-524799/11

Matrix: Water

Analysis Batch: 524799

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10	mg/L			01/21/25 13:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	104		54 - 120				01/21/25 13:35	1

Lab Sample ID: LCS 570-524799/12

Matrix: Water

Analysis Batch: 524799

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	2.00	1.92		mg/L		96	78 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Hexafluoro-2-propanol (Surr)	86		54 - 120				

Lab Sample ID: LCSD 570-524799/13

Matrix: Water

Analysis Batch: 524799

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
Ethanol	2.00	1.88		mg/L		94	78 - 131	2	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Hexafluoro-2-propanol (Surr)	95		54 - 120						

Lab Sample ID: MRL 570-524799/14

Matrix: Water

Analysis Batch: 524799

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	0.100	0.113		mg/L		113	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
Hexafluoro-2-propanol (Surr)	111		54 - 120				

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 8015B - Nonhalogenated Organic Compounds - Direct Injection (GC) (Continued)

Lab Sample ID: 380-131011-1 MS

Matrix: Water

Analysis Batch: 524799

Client Sample ID: AIEA WELLS P2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	<0.10	F2	2.00	1.61		mg/L		81	20 - 173
Surrogate	MS %Recovery	MS Qualifier	Limits						
Hexafluoro-2-propanol (Surr)	75		54 - 120						

Lab Sample ID: 380-131011-1 MSD

Matrix: Water

Analysis Batch: 524799

Client Sample ID: AIEA WELLS P2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol	<0.10	F2	2.00	2.06	F2	mg/L		103	20 - 173	25	21
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Hexafluoro-2-propanol (Surr)	108		54 - 120								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-128801/39

Matrix: Water

Analysis Batch: 128801

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.50		0.50	mg/L			01/17/25 21:30	1
Sulfate	<0.25		0.25	mg/L			01/17/25 21:30	1

Lab Sample ID: LCS 380-128801/42

Matrix: Water

Analysis Batch: 128801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.9		mg/L		108	90 - 110
Sulfate	50.0	53.4		mg/L		107	90 - 110

Lab Sample ID: LCSD 380-128801/43

Matrix: Water

Analysis Batch: 128801

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
Chloride	25.0	26.8		mg/L		107	90 - 110	1	20
Sulfate	50.0	52.9		mg/L		106	90 - 110	1	20

Lab Sample ID: MRL 380-128801/40

Matrix: Water

Analysis Batch: 128801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.125	0.129	J	mg/L		103	50 - 150
Sulfate	0.250	0.269		mg/L		108	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 380-128801/41

Matrix: Water

Analysis Batch: 128801

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.485	J	mg/L		97	50 - 150
Sulfate	1.00	1.02		mg/L		102	50 - 150

Lab Sample ID: 380-130880-K-1 MS

Matrix: Water

Analysis Batch: 128801

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
Chloride	11	^2	12.5	25.0		mg/L		109	80 - 120
Sulfate	11		25.0	38.8		mg/L		112	80 - 120

Lab Sample ID: 380-130880-K-1 MSD

Matrix: Water

Analysis Batch: 128801

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
Chloride	11	^2	12.5	24.8		mg/L		108	80 - 120	1	20
Sulfate	11		25.0	38.5		mg/L		111	80 - 120	1	20

Lab Sample ID: MB 380-130357/6

Matrix: Water

Analysis Batch: 130357

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<5.0		5.0	ug/L			01/24/25 18:14	1

Lab Sample ID: LCS 380-130357/7

Matrix: Water

Analysis Batch: 130357

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	100	99.6		ug/L		100	90 - 110

Lab Sample ID: LCSD 380-130357/8

Matrix: Water

Analysis Batch: 130357

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
Bromide	100	98.1		ug/L		98	90 - 110	2	10

Lab Sample ID: MRL 380-130357/5

Matrix: Water

Analysis Batch: 130357

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.00	5.10		ug/L		102	75 - 125

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-131506-Y-1 MS

Matrix: Water

Analysis Batch: 130357

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
Bromide	23		50.0	70.9		ug/L		96	80 - 120

Lab Sample ID: 380-131506-Y-1 MSD

Matrix: Water

Analysis Batch: 130357

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
Bromide	23		50.0	72.1		ug/L		98	80 - 120	2	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MBL 380-129289/53

Matrix: Water

Analysis Batch: 129289

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.070		1.0	mg/L			01/20/25 15:22	1
Magnesium	<0.0099		0.10	mg/L			01/20/25 15:22	1
Potassium	<0.12		1.0	mg/L			01/20/25 15:22	1
Sodium	<0.41		1.0	mg/L			01/20/25 15:22	1

Lab Sample ID: LCS 380-129289/57

Matrix: Water

Analysis Batch: 129289

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	51.5		mg/L		103	85 - 115
Magnesium	20.0	20.4		mg/L		102	85 - 115
Potassium	20.0	20.5		mg/L		103	85 - 115
Sodium	50.0	51.2		mg/L		102	85 - 115

Lab Sample ID: LCSD 380-129289/58

Matrix: Water

Analysis Batch: 129289

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
Calcium	50.0	51.0		mg/L		102	85 - 115	1	20
Magnesium	20.0	20.1		mg/L		101	85 - 115	1	20
Potassium	20.0	20.3		mg/L		102	85 - 115	1	20
Sodium	50.0	50.4		mg/L		101	85 - 115	2	20

Lab Sample ID: LLCS 380-129289/56

Matrix: Water

Analysis Batch: 129289

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	1.00	1.02		mg/L		102	50 - 150
Magnesium	0.100	0.0976	J	mg/L		98	50 - 150
Potassium	1.00	0.960	J	mg/L		96	50 - 150
Sodium	1.00	1.01		mg/L		101	50 - 150

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: 380-130999-B-4 MS

Matrix: Water

Analysis Batch: 129289

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
Calcium	40		50.0	88.6		mg/L		96	70 - 130
Magnesium	7.1		20.0	26.8		mg/L		99	70 - 130
Potassium	1.8		20.0	22.1		mg/L		101	70 - 130
Sodium	53		50.0	100		mg/L		95	70 - 130

Lab Sample ID: 380-130999-B-4 MSD

Matrix: Water

Analysis Batch: 129289

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
Calcium	40		50.0	88.9		mg/L		97	70 - 130	0	20
Magnesium	7.1		20.0	26.9		mg/L		99	70 - 130	0	20
Potassium	1.8		20.0	22.2		mg/L		102	70 - 130	1	20
Sodium	53		50.0	101		mg/L		96	70 - 130	0	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MBL 380-129330/89

Matrix: Water

Analysis Batch: 129330

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.48		1.0	ug/L			01/18/25 17:36	1
Arsenic	<0.25		1.0	ug/L			01/18/25 17:36	1
Beryllium	<0.12		0.30	ug/L			01/18/25 17:36	1
Cadmium	<0.081		0.50	ug/L			01/18/25 17:36	1
Chromium	<0.33		0.90	ug/L			01/18/25 17:36	1
Copper	<0.28		1.0	ug/L			01/18/25 17:36	1
Lead	<0.084		0.50	ug/L			01/18/25 17:36	1
Nickel	<0.38		1.0	ug/L			01/18/25 17:36	1
Selenium	<0.25		2.0	ug/L			01/18/25 17:36	1
Silver	<0.30		0.50	ug/L			01/18/25 17:36	1
Thallium	<0.10		0.30	ug/L			01/18/25 17:36	1
Zinc	<4.3		20	ug/L			01/18/25 17:36	1

Lab Sample ID: LCS 380-129330/91

Matrix: Water

Analysis Batch: 129330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	48.5		ug/L		97	85 - 115
Arsenic	50.0	50.9		ug/L		102	85 - 115
Beryllium	50.0	47.2		ug/L		94	85 - 115
Cadmium	50.0	49.5		ug/L		99	85 - 115
Chromium	50.0	51.5		ug/L		103	85 - 115
Copper	50.0	50.1		ug/L		100	85 - 115
Lead	50.0	51.8		ug/L		104	85 - 115
Nickel	50.0	50.3		ug/L		101	85 - 115
Selenium	50.0	50.9		ug/L		102	85 - 115

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 380-129330/91

Matrix: Water

Analysis Batch: 129330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Silver	50.0	51.3		ug/L		103	85 - 115
Thallium	50.0	51.8		ug/L		104	85 - 115
Zinc	50.0	49.4		ug/L		99	85 - 115

Lab Sample ID: LCSD 380-129330/92

Matrix: Water

Analysis Batch: 129330

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
Antimony	50.0	48.7		ug/L		97	85 - 115	1	20
Arsenic	50.0	50.8		ug/L		102	85 - 115	0	20
Beryllium	50.0	47.8		ug/L		96	85 - 115	1	20
Cadmium	50.0	48.8		ug/L		98	85 - 115	1	20
Chromium	50.0	51.0		ug/L		102	85 - 115	1	20
Copper	50.0	50.2		ug/L		100	85 - 115	0	20
Lead	50.0	51.2		ug/L		102	85 - 115	1	20
Nickel	50.0	50.2		ug/L		100	85 - 115	0	20
Selenium	50.0	51.1		ug/L		102	85 - 115	0	20
Silver	50.0	50.8		ug/L		102	85 - 115	1	20
Thallium	50.0	50.9		ug/L		102	85 - 115	2	20
Zinc	50.0	49.4		ug/L		99	85 - 115	0	20

Lab Sample ID: LLCS 380-129330/90

Matrix: Water

Analysis Batch: 129330

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	1.00	1.03		ug/L		103	50 - 150
Arsenic	1.00	1.17		ug/L		117	50 - 150
Beryllium	0.300	0.284	J	ug/L		95	50 - 150
Cadmium	0.500	0.483	J	ug/L		97	50 - 150
Chromium	0.900	1.01		ug/L		112	50 - 150
Copper	1.00	1.06		ug/L		106	50 - 150
Lead	0.500	0.529		ug/L		106	50 - 150
Nickel	1.00	0.985	J	ug/L		99	50 - 150
Selenium	2.00	2.10		ug/L		105	50 - 150
Silver	0.500	0.532		ug/L		106	50 - 150
Thallium	0.300	0.310		ug/L		103	50 - 150
Zinc	20.0	20.5		ug/L		102	50 - 150

Lab Sample ID: 380-131006-B-1 MS

Matrix: Water

Analysis Batch: 129330

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
Antimony	<1.0		50.0	44.4		ug/L		89	70 - 130
Arsenic	<1.0		50.0	56.0		ug/L		112	70 - 130
Beryllium	<0.30		50.0	39.6		ug/L		79	70 - 130
Cadmium	<0.50		50.0	47.7		ug/L		95	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 380-131006-B-1 MS

Matrix: Water

Analysis Batch: 129330

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
Chromium	<0.90		50.0	48.6		ug/L		96	70 - 130
Copper	1.7		50.0	45.8		ug/L		88	70 - 130
Lead	0.51		50.0	47.4		ug/L		94	70 - 130
Nickel	1.6		50.0	46.4		ug/L		90	70 - 130
Selenium	<2.0	F1	50.0	62.7		ug/L		125	70 - 130
Silver	<0.50		50.0	44.5		ug/L		89	70 - 130
Thallium	<0.30		50.0	47.6		ug/L		95	70 - 130
Zinc	22		50.0	69.6		ug/L		96	70 - 130

Lab Sample ID: 380-131006-B-1 MSD

Matrix: Water

Analysis Batch: 129330

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
Antimony	<1.0		50.0	49.9		ug/L		100	70 - 130	12	20
Arsenic	<1.0		50.0	61.0		ug/L		122	70 - 130	9	20
Beryllium	<0.30		50.0	42.8		ug/L		86	70 - 130	8	20
Cadmium	<0.50		50.0	51.3		ug/L		103	70 - 130	7	20
Chromium	<0.90		50.0	52.2		ug/L		103	70 - 130	7	20
Copper	1.7		50.0	49.4		ug/L		95	70 - 130	8	20
Lead	0.51		50.0	51.1		ug/L		101	70 - 130	8	20
Nickel	1.6		50.0	50.2		ug/L		97	70 - 130	8	20
Selenium	<2.0	F1	50.0	68.4	F1	ug/L		137	70 - 130	9	20
Silver	<0.50		50.0	49.1		ug/L		98	70 - 130	10	20
Thallium	<0.30		50.0	51.6		ug/L		103	70 - 130	8	20
Zinc	22		50.0	74.0		ug/L		105	70 - 130	6	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MBL 810-130662/1-A

Matrix: Water

Analysis Batch: 130718

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 130662

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.063		0.20	ug/L		01/24/25 11:57	01/24/25 16:49	1

Lab Sample ID: LCS 810-130662/3-A

Matrix: Water

Analysis Batch: 130718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 130662

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.994		ug/L		99	85 - 115

Lab Sample ID: LLCS 810-130662/2-A

Matrix: Water

Analysis Batch: 130718

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 130662

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	0.215		ug/L		108	50 - 150

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QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: 245.1 - Mercury (CVAA) (Continued)

Lab Sample ID: 810-134794-A-1-B MS
Matrix: Water
Analysis Batch: 130718

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 130662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.20		1.00	1.03		ug/L		103	70 - 130

Lab Sample ID: 810-134794-A-1-C MSD
Matrix: Water
Analysis Batch: 130718

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 130662

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	<0.20		1.00	0.960		ug/L		96	70 - 130	7	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-129914/1
Matrix: Water
Analysis Batch: 129914

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<2.0		2.0	mg/L			01/22/25 17:51	1
Bicarbonate Alkalinity as CaCO3	2.52	B	2.0	mg/L			01/22/25 17:51	1
Carbonate Alkalinity as CaCO3	<2.0		2.0	mg/L			01/22/25 17:51	1

Lab Sample ID: LCS 380-129914/4
Matrix: Water
Analysis Batch: 129914

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	99.9		mg/L		100	90 - 110

Lab Sample ID: LCSD 380-129914/19
Matrix: Water
Analysis Batch: 129914

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Alkalinity	100	101		mg/L		101	90 - 110	1	20

Lab Sample ID: LLCS 380-129914/5
Matrix: Water
Analysis Batch: 129914

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	20.0	20.1		mg/L		100	90 - 110

Lab Sample ID: MRL 380-129914/2
Matrix: Water
Analysis Batch: 129914

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	2.00	2.54		mg/L		127	50 - 150

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 380-131011-1 MS

Matrix: Water

Analysis Batch: 129914

Client Sample ID: AIEA WELLS P2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	59		100	159		mg/L		100	80 - 120

Lab Sample ID: 380-131011-1 MSD

Matrix: Water

Analysis Batch: 129914

Client Sample ID: AIEA WELLS P2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	59		100	160		mg/L		101	80 - 120	1	20

Lab Sample ID: 380-131011-1 DU

Matrix: Water

Analysis Batch: 129914

Client Sample ID: AIEA WELLS P2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	59		59.1		mg/L		0.3	20
Bicarbonate Alkalinity as CaCO3	59	B ^2	59.1	B	mg/L		0.3	20
Carbonate Alkalinity as CaCO3	<2.0		<2.0		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-130052/3

Matrix: Water

Analysis Batch: 130052

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	umhos/cm			01/22/25 17:51	1

Lab Sample ID: LCS 380-130052/5

Matrix: Water

Analysis Batch: 130052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1000	992		umhos/cm		99	90 - 110

Lab Sample ID: LCSD 380-130052/17

Matrix: Water

Analysis Batch: 130052

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
Specific Conductance	1000	988		umhos/cm		99	90 - 110	0	10

Lab Sample ID: MRL 380-130052/4

Matrix: Water

Analysis Batch: 130052

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	2.00	1.90	J	umhos/cm		95	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: SM 2510B - Conductivity, Specific Conductance (Continued)

Lab Sample ID: 380-131011-1 DU
Matrix: Water
Analysis Batch: 130052

Client Sample ID: AIEA WELLS P2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	500		497		umhos/cm		0.2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 380-129059/1
Matrix: Water
Analysis Batch: 129059

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	mg/L			01/20/25 09:36	1

Lab Sample ID: HLCS 380-129059/5
Matrix: Water
Analysis Batch: 129059

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

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	700	702		mg/L		100	80 - 114

Lab Sample ID: LCS 380-129059/4
Matrix: Water
Analysis Batch: 129059

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	175	164		mg/L		94	80 - 114

Lab Sample ID: MRL 380-129059/2
Matrix: Water
Analysis Batch: 129059

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	10.0	10.0		mg/L		100	50 - 150

Lab Sample ID: MRL 380-129059/3
Matrix: Water
Analysis Batch: 129059

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	10.0	10.0		mg/L		100	50 - 150

Lab Sample ID: 380-131013-C-1 DU
Matrix: Water
Analysis Batch: 129059

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	400		392		mg/L		3	10

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-129912/40
Matrix: Water
Analysis Batch: 129912

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.050		0.050	mg/L			01/22/25 16:24	1

Lab Sample ID: LCS 380-129912/42
Matrix: Water
Analysis Batch: 129912

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	1.00	1.05		mg/L		105	90 - 110

Lab Sample ID: LCSD 380-129912/43
Matrix: Water
Analysis Batch: 129912

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
Fluoride	1.00	1.06		mg/L		106	90 - 110	1	10

Lab Sample ID: MRL 380-129912/41
Matrix: Water
Analysis Batch: 129912

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.0500	0.0413	J	mg/L		83	50 - 150

Lab Sample ID: 380-130433-A-3 MS
Matrix: Water
Analysis Batch: 129912

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
Fluoride	0.53		1.00	1.59		mg/L		107	80 - 120

Lab Sample ID: 380-130433-A-3 MSD
Matrix: Water
Analysis Batch: 129912

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
Fluoride	0.53		1.00	1.60		mg/L		108	80 - 120	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-129919/5
Matrix: Water
Analysis Batch: 129919

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.5			SU			01/22/25 17:51	1

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: SM 4500 H+ B - pH (Continued)

Lab Sample ID: LCS 380-129919/6
Matrix: Water
Analysis Batch: 129919

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	6.00	6.0		SU		100	98 - 102

Lab Sample ID: LCSD 380-129919/18
Matrix: Water
Analysis Batch: 129919

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
pH	6.00	6.0		SU		100	98 - 102	0	2

Lab Sample ID: 380-131011-1 DU
Matrix: Water
Analysis Batch: 129919

Client Sample ID: AIEA WELLS P2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.8	HF	7.8		SU		0.1	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MBL 380-129133/2
Matrix: Water
Analysis Batch: 129133

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.0099		0.050	mg/L			01/20/25 16:55	1

Lab Sample ID: LCS 380-129133/4
Matrix: Water
Analysis Batch: 129133

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.250	0.233		mg/L		93	90 - 110

Lab Sample ID: LCSD 380-129133/5
Matrix: Water
Analysis Batch: 129133

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
Sulfide	0.250	0.268		mg/L		107	90 - 110	14	20

Lab Sample ID: MRL 380-129133/3
Matrix: Water
Analysis Batch: 129133

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Sulfide	0.0500	0.0640		mg/L		128	50 - 150

QC Sample Results

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

Job ID: 380-131011-1
SDG: Quarterly

Method: SM 4500 S2 D - Sulfide, Total (Continued)

Lab Sample ID: 380-131006-J-1 MS

Matrix: Water

Analysis Batch: 129133

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		
Sulfide	<0.050	F1	0.250	0.391	F1	mg/L		149	80 - 120		

Lab Sample ID: 380-131006-J-1 MSD

Matrix: Water

Analysis Batch: 129133

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
Sulfide	<0.050	F1	0.250	0.388	F1	mg/L		148	80 - 120	1	20

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

GC/MS VOA

Analysis Batch: 129749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	524.2	
380-131011-2	TB: AIEA WELLS P2	Total/NA	Water	524.2	
MB 380-129749/11	Method Blank	Total/NA	Water	524.2	
LCS 380-129749/8	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-129749/9	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-129749/10	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 130408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	524.2	
MB 380-130408/15	Method Blank	Total/NA	Water	524.2	
LCS 380-130408/11	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-130408/12	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-130408/13	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-130408/14	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 131660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 129273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	525.2	
MB 380-129273/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-129273/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-129273/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-131022-AC-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-131022-AD-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

Analysis Batch: 129391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	525.2	129273
MB 380-129273/21-A	Method Blank	Total/NA	Water	525.2	129273
LCS 380-129273/23-A	Lab Control Sample	Total/NA	Water	525.2	129273
MRL 380-129273/22-A	Lab Control Sample	Total/NA	Water	525.2	129273
380-131022-AC-1-A MS	Matrix Spike	Total/NA	Water	525.2	129273
380-131022-AD-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	129273

Prep Batch: 524601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	625.1	
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-524601/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-524601/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 526704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	625.1	524601
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1	524601

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

GC/MS Semi VOA

Analysis Batch: 527743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	625.1 SIM	524601
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1 SIM	524601
LCS 570-524601/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	524601
LCSD 570-524601/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	524601

GC VOA

Analysis Batch: 525353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	8015B GRO LL	
380-131011-2	TB: AIEA WELLS P2	Total/NA	Water	8015B GRO LL	
MB 570-525353/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-525353/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-525353/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-525353/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-130371-C-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-130371-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 129069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	505	
MB 380-129069/3-A	Method Blank	Total/NA	Water	505	
LCS 380-129069/28-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-129069/30-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-129069/31-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-129069/39-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-129069/47-A	Lab Control Sample	Total/NA	Water	505	
LCSD 380-129069/29-A	Lab Control Sample Dup	Total/NA	Water	505	
MRL 380-129069/1-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-129069/2-A	Lab Control Sample	Total/NA	Water	505	
380-130863-C-1-A MS	Matrix Spike	Total/NA	Water	505	
380-130863-D-1-A MS	Matrix Spike	Total/NA	Water	505	
380-130864-B-1-A MS	Matrix Spike	Total/NA	Water	505	
380-130864-C-1-A MS	Matrix Spike	Total/NA	Water	505	

Prep Batch: 129115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	504.1	
MBL 380-129115/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-129115/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-129115/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-129115/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-130903-B-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-130883-A-1-A DU	Duplicate	Total/NA	Water	504.1	

Prep Batch: 129116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-2	TB: AIEA WELLS P2	Total/NA	Water	504.1	
MBL 380-129116/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-129116/29-A	Lab Control Sample	Total/NA	Water	504.1	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

GC Semi VOA (Continued)

Prep Batch: 129116 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-129116/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-129116/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-130905-A-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-130901-C-1-A DU	Duplicate	Total/NA	Water	504.1	

Analysis Batch: 129392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	505	129069
MB 380-129069/3-A	Method Blank	Total/NA	Water	505	129069
LCS 380-129069/28-A	Lab Control Sample	Total/NA	Water	505	129069
LCS 380-129069/30-A	Lab Control Sample	Total/NA	Water	505	129069
LCS 380-129069/31-A	Lab Control Sample	Total/NA	Water	505	129069
LCS 380-129069/39-A	Lab Control Sample	Total/NA	Water	505	129069
LCS 380-129069/47-A	Lab Control Sample	Total/NA	Water	505	129069
LCSD 380-129069/29-A	Lab Control Sample Dup	Total/NA	Water	505	129069
MRL 380-129069/1-A	Lab Control Sample	Total/NA	Water	505	129069
MRL 380-129069/2-A	Lab Control Sample	Total/NA	Water	505	129069
380-130863-C-1-A MS	Matrix Spike	Total/NA	Water	505	129069
380-130863-D-1-A MS	Matrix Spike	Total/NA	Water	505	129069
380-130864-B-1-A MS	Matrix Spike	Total/NA	Water	505	129069
380-130864-C-1-A MS	Matrix Spike	Total/NA	Water	505	129069

Analysis Batch: 129398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	504.1	129115
MBL 380-129115/4-A	Method Blank	Total/NA	Water	504.1	129115
LCS 380-129115/29-A	Lab Control Sample	Total/NA	Water	504.1	129115
MRL 380-129115/2-A	Lab Control Sample	Total/NA	Water	504.1	129115
MRL 380-129115/3-A	Lab Control Sample	Total/NA	Water	504.1	129115
380-130903-B-1-A MS	Matrix Spike	Total/NA	Water	504.1	129115
380-130883-A-1-A DU	Duplicate	Total/NA	Water	504.1	129115

Analysis Batch: 129725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-2	TB: AIEA WELLS P2	Total/NA	Water	504.1	129116
MBL 380-129116/4-A	Method Blank	Total/NA	Water	504.1	129116
LCS 380-129116/29-A	Lab Control Sample	Total/NA	Water	504.1	129116
MRL 380-129116/2-A	Lab Control Sample	Total/NA	Water	504.1	129116
MRL 380-129116/3-A	Lab Control Sample	Total/NA	Water	504.1	129116
380-130905-A-1-A MS	Matrix Spike	Total/NA	Water	504.1	129116
380-130901-C-1-A DU	Duplicate	Total/NA	Water	504.1	129116

Prep Batch: 524661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	3510C	
MB 570-524661/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-524661/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-524661/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-524661/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-130371-B-3-A MS	Matrix Spike	Total/NA	Water	3510C	
380-130371-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

GC Semi VOA

Analysis Batch: 524799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	8015B	
MB 570-524799/11	Method Blank	Total/NA	Water	8015B	
LCS 570-524799/12	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-524799/13	Lab Control Sample Dup	Total/NA	Water	8015B	
MRL 570-524799/14	Lab Control Sample	Total/NA	Water	8015B	
380-131011-1 MS	AIEA WELLS P2	Total/NA	Water	8015B	
380-131011-1 MSD	AIEA WELLS P2	Total/NA	Water	8015B	

Analysis Batch: 526993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	8015B	524661
MB 570-524661/1-A	Method Blank	Total/NA	Water	8015B	524661
LCS 570-524661/2-A	Lab Control Sample	Total/NA	Water	8015B	524661
LCSD 570-524661/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	524661
MRL 570-524661/4-A	Lab Control Sample	Total/NA	Water	8015B	524661
380-130371-B-3-A MS	Matrix Spike	Total/NA	Water	8015B	524661
380-130371-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	524661

HPLC/IC

Analysis Batch: 128801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	300.0	
MB 380-128801/39	Method Blank	Total/NA	Water	300.0	
LCS 380-128801/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-128801/43	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-128801/40	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-128801/41	Lab Control Sample	Total/NA	Water	300.0	
380-130880-K-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-130880-K-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 130357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	300.0	
MB 380-130357/6	Method Blank	Total/NA	Water	300.0	
LCS 380-130357/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-130357/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-130357/5	Lab Control Sample	Total/NA	Water	300.0	
380-131506-Y-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-131506-Y-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Analysis Batch: 129289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	200.7 Rev 4.4	
MBL 380-129289/53	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-129289/57	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-129289/58	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-129289/56	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-130999-B-4 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-130999-B-4 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Metals

Analysis Batch: 129330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	200.8	
MBL 380-129330/89	Method Blank	Total/NA	Water	200.8	
LCS 380-129330/91	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-129330/92	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-129330/90	Lab Control Sample	Total/NA	Water	200.8	
380-131006-B-1 MS	Matrix Spike	Total/NA	Water	200.8	
380-131006-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 130662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	245.1	
MBL 810-130662/1-A	Method Blank	Total/NA	Water	245.1	
LCS 810-130662/3-A	Lab Control Sample	Total/NA	Water	245.1	
LLCS 810-130662/2-A	Lab Control Sample	Total/NA	Water	245.1	
810-134794-A-1-B MS	Matrix Spike	Total/NA	Water	245.1	
810-134794-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 130718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	245.1	130662
MBL 810-130662/1-A	Method Blank	Total/NA	Water	245.1	130662
LCS 810-130662/3-A	Lab Control Sample	Total/NA	Water	245.1	130662
LLCS 810-130662/2-A	Lab Control Sample	Total/NA	Water	245.1	130662
810-134794-A-1-B MS	Matrix Spike	Total/NA	Water	245.1	130662
810-134794-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	130662

General Chemistry

Analysis Batch: 129059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 2540C	
MB 380-129059/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-129059/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-129059/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-129059/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-129059/3	Lab Control Sample	Total/NA	Water	SM 2540C	
380-131013-C-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 129133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 4500 S2 D	
MBL 380-129133/2	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-129133/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-129133/5	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-129133/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-131006-J-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
380-131006-J-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Analysis Batch: 129912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 4500 F C	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-131011-1
SDG: Quarterly

General Chemistry (Continued)

Analysis Batch: 129912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-129912/40	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-129912/42	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-129912/43	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-129912/41	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-130433-A-3 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-130433-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 129914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 2320B	
MB 380-129914/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-129914/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-129914/19	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-129914/5	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-129914/2	Lab Control Sample	Total/NA	Water	SM 2320B	
380-131011-1 MS	AIEA WELLS P2	Total/NA	Water	SM 2320B	
380-131011-1 MSD	AIEA WELLS P2	Total/NA	Water	SM 2320B	
380-131011-1 DU	AIEA WELLS P2	Total/NA	Water	SM 2320B	

Analysis Batch: 129919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 4500 H+ B	
MB 380-129919/5	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-129919/6	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-129919/18	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-131011-1 DU	AIEA WELLS P2	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 130052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131011-1	AIEA WELLS P2	Total/NA	Water	SM 2510B	
MB 380-130052/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-130052/5	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-130052/17	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-130052/4	Lab Control Sample	Total/NA	Water	SM 2510B	
380-131011-1 DU	AIEA WELLS P2	Total/NA	Water	SM 2510B	

Lab Chronicle

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

Job ID: 380-131011-1
SDG: Quarterly

Client Sample ID: AIEA WELLS P2

Lab Sample ID: 380-131011-1

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	129749	WE3W	EA POM	01/23/25 01:49
Total/NA	Analysis	524.2		1	130408	UKCP	EA POM	01/29/25 23:45
Total/NA	Analysis	524.2		1	131660	USZZ	EA POM	01/29/25 23:45
Total/NA	Prep	525.2			129273	OTM3	EA POM	01/21/25 06:08
Total/NA	Analysis	525.2		1	129391	UPAC	EA POM	01/21/25 18:08
Total/NA	Prep	625.1			524601	H1SH	EET CAL 4	01/20/25 13:18
Total/NA	Analysis	625.1		1	526704	PQS1	EET CAL 4	01/27/25 16:25
Total/NA	Prep	625.1			524601	H1SH	EET CAL 4	01/20/25 13:18
Total/NA	Analysis	625.1 SIM		1	527743	PQS1	EET CAL 4	01/29/25 19:23
Total/NA	Analysis	8015B GRO LL		1	525353	A9VE	EET CAL 4	01/22/25 18:24
Total/NA	Prep	504.1			129115	LZ8Q	EA POM	01/20/25 19:00 - 01/20/25 20:00 ¹
Total/NA	Analysis	504.1		1	129398	LZ8Q	EA POM	01/21/25 04:22
Total/NA	Prep	505			129069	DR5R	EA POM	01/20/25 12:06 - 01/20/25 13:56 ¹
Total/NA	Analysis	505		1	129392	DR5R	EA POM	01/21/25 03:15
Total/NA	Prep	3510C			524661	TVD6	EET CAL 4	01/20/25 15:09
Total/NA	Analysis	8015B		1	526993	E5RH	EET CAL 4	01/28/25 03:41
Total/NA	Analysis	8015B		1	524799	ZE2W	EET CAL 4	01/21/25 15:46
Total/NA	Analysis	300.0		5	128801	BG6L	EA POM	01/18/25 02:33
Total/NA	Analysis	300.0		1	130357	UNJR	EA POM	01/25/25 05:12
Total/NA	Analysis	200.7 Rev 4.4		1	129289	MF7S	EA POM	01/20/25 16:14
Total/NA	Analysis	200.8		1	129330	VB9B	EA POM	01/18/25 17:58
Total/NA	Prep	245.1			130662	AC	EA SB	01/24/25 11:57
Total/NA	Analysis	245.1		1	130718	AC	EA SB	01/24/25 17:16
Total/NA	Analysis	SM 2320B		1	129914	PK4Q	EA POM	01/22/25 18:37
Total/NA	Analysis	SM 2510B		1	130052	PK4Q	EA POM	01/22/25 18:37
Total/NA	Analysis	SM 2540C		1	129059	WZH3	EA POM	01/20/25 09:36
Total/NA	Analysis	SM 4500 F C		1	129912	PK4Q	EA POM	01/22/25 17:31
Total/NA	Analysis	SM 4500 H+ B		1	129919	PK4Q	EA POM	01/22/25 18:37
Total/NA	Analysis	SM 4500 S2 D		1	129133	ZJ2C	EA POM	01/20/25 16:55

Client Sample ID: TB: AIEA WELLS P2

Lab Sample ID: 380-131011-2

Date Collected: 01/15/25 10:30

Matrix: Water

Date Received: 01/17/25 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	129749	WE3W	EA POM	01/23/25 02:13
Total/NA	Analysis	8015B GRO LL		1	525353	A9VE	EET CAL 4	01/22/25 22:39
Total/NA	Prep	504.1			129116	LZ8Q	EA POM	01/21/25 18:00 - 01/21/25 19:00 ¹
Total/NA	Analysis	504.1		1	129725	LZ8Q	EA POM	01/22/25 14:45

¹ This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Lab Chronicle

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

Job ID: 380-131011-1
SDG: Quarterly

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100
EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

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Accreditation/Certification Summary

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

Job ID: 380-131011-1
SDG: Quarterly

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
505	505	Water	Polychlorinated biphenyls, Total
524.2		Water	1,3-Dichloropropene, Total
524.2		Water	2-Butanone (MEK)
524.2		Water	Acetone
524.2		Water	Bromodichloromethane
524.2		Water	Bromoethane
524.2		Water	Bromoform
524.2		Water	Chlorodibromomethane
524.2		Water	Chloroform (Trichloromethane)
524.2		Water	m,p Xylenes
524.2		Water	o-Xylene
524.2		Water	Tertiary Butyl Alcohol (TBA)
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)

Accreditation/Certification Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Laboratory: Eurofins Eaton Analytical Pomona (Continued)

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

Authority	Program	Identification Number	Expiration Date
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	trans-Nonachlor
SM 2320B		Water	Bicarbonate Alkalinity as CaCO ₃
SM 2320B		Water	Carbonate Alkalinity as CaCO ₃
SM 4500 S2 D		Water	Sulfide

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	02-12-25
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	525-23-159-97150	06-08-26
Washington	State	C916	10-11-25

Laboratory: Eurofins Eaton Analytical South Bend

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	ISO/IEC 17025	5794.01	07-31-26
Alabama	State	40700	06-30-25
Alaska	State	IN00035	06-30-25
Arizona	State	AZ0432	07-26-25
Arkansas (DW)	State	EPA IN00035	06-30-25
California	State	2920	06-30-25
Colorado	State	IN00035	02-28-25
Connecticut	State	PH-0132	03-31-26
Delaware (DW)	State	IN00035	06-30-25
Florida	NELAP	E87775	06-30-25
Georgia (DW)	State	929	06-30-25
Guam	State	23-011R	07-15-25
Hawaii	State	IN035	06-30-25
Idaho (DW)	State	IN00035	12-31-25
IL Dept. of Public Health (Micro)	State	17767	06-30-25
Illinois	NELAP	200001	09-30-25
Indiana	State	C-71-01	12-31-25
Indiana (Micro)	State	M-76-07	12-31-25
Iowa	State	IA Lab #098	11-01-25
Kansas	NELAP	E-10233	10-31-25
Kentucky (DW)	State	KY90056	12-31-25

Accreditation/Certification Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Laboratory: Eurofins Eaton Analytical South Bend (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
Louisiana (DW)	State	LA014	12-31-25
Maine	State	IN00035	05-01-25
Maryland	State	209	06-30-25
Massachusetts	State	M-IN035	06-30-25
MI - RadChem Recognition	State	9926	06-01-25
Michigan	State	9926	12-31-25
Minnesota	NELAP	018-999-338	12-31-25
Mississippi	State	IN00035	06-30-25
Missouri	State	880	09-30-27
Montana (DW)	State	CERT0026	01-01-26
Nebraska	State	NE-OS-05-04	06-30-25
Nevada	State	IN000352024-01	07-31-25
New Hampshire	NELAP	2124	11-05-25
New Jersey	NELAP	IN598	06-30-25
New Mexico	State	IN00035	06-30-25
New York	NELAP	11398	04-01-25
North Carolina (DW)	State	18700	07-31-25
North Dakota	State	R-035	06-30-24 *
Northern Mariana Islands (DW)	State	IN00035	06-30-25
Ohio	State	87775	06-30-25
Oklahoma	NELAP	D9508	08-31-25
Oregon	NELAP	4156	09-16-25
Pennsylvania	NELAP	68-00466	04-30-25
Puerto Rico	State	IN00035	04-01-25
Rhode Island	State	LAO00343	02-13-25
South Carolina	State	95005001	06-30-25
South Dakota (DW)	State	IN00035	01-28-25
Tennessee	State	TN02973	06-30-25
Texas	NELAP	T104704187-22-16	01-28-25
Texas	TCEQ Water Supply	TX207	06-30-25
USEPA UCMR 5	US Federal Programs	IN00035	12-31-25
Utah	NELAP	IN00035	07-31-25
Vermont	State	VT-8775	11-15-25
Virginia	NELAP	460275	03-14-25
Washington	State	C837	01-01-26
West Virginia (DW)	State	9927 C	01-31-25
Wisconsin	State	999766900	02-11-25
Wisconsin (Micro)	State	10121	12-31-25
Wyoming	State	8TMS-L	06-30-25

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

Eurofins Eaton Analytical Pomona

Method Summary

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

Job ID: 380-131011-1
SDG: Quarterly

Method	Method Description	Protocol	Laboratory
524.2	Total Trihalomethanes	EPA-DW	EA POM
524.2	Volatile Organic Compounds (GC/MS SIM)	EPA-DW	EA POM
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	EA POM
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
504.1	EDB, DBCP and 1,2,3-TCP (GC)	EPA-DW2	EA POM
505	Organochlorine Pesticides/PCBs (GC)	EPA	EA POM
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	EET CAL 4
8015B	Nonhalogenated Organic Compounds - Direct Injection (GC)	SW846	EET CAL 4
300.0	Anions, Ion Chromatography	EPA	EA POM
200.7 Rev 4.4	Metals (ICP)	EPA	EA POM
200.8	Metals (ICP/MS)	EPA	EA POM
245.1	Mercury (CVAA)	EPA	EA SB
SM 2320B	Alkalinity	SM	EA POM
SM 2510B	Conductivity, Specific Conductance	SM	EA POM
SM 2540C	Solids, Total Dissolved (TDS)	SM	EA POM
SM 4500 F C	Fluoride	SM	EA POM
SM 4500 H+ B	pH	SM	EA POM
SM 4500 S2 D	Sulfide, Total	SM	EA POM
245.1	Preparation, Mercury	EPA	EA SB
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
504.1	Microextraction	EPA-DW	EA POM
505	Extraction, Organohalide Pesticides	EPA	EA POM
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
625.1	Liquid-Liquid Extraction	40CFR136A	EET CAL 4
None	Autocomplete Prep - Metals - No Digestion required	None	EA POM

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

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

EPA-DW2 = "Methods For The Determination of Organic Compounds in Drinking Water - Supplement III ", EPA/600/R-95-131, August 1995

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

EA SB = Eurofins Eaton Analytical South Bend, 110 S Hill Street, South Bend, IN 46617, TEL (574)233-4777

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: 380-131011-1
SDG: Quarterly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-131011-1	AIEA WELLS P2	Water	01/15/25 10:30	01/17/25 10:28
380-131011-2	TB: AIEA WELLS P2	Water	01/15/25 10:30	01/17/25 10:28

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Chain of Custody Record



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380-131011 COC

Client Information		Sampler: Lab PM Arada, Rachelle		Carrier Tracking No(s): 380-131011 COC	
Client Contact: Dr Ron Fenstemacher		Phone: 808-748-5840		State of Origin: Hawaii	
City & County of Honolulu		PWSID:		Job #:	
Address: 630 South Beretania Street Chemistry Lab Honolulu HI, 96843		Due Date Requested: TAT Requested (days): Standard Compliance Project: ☐ Yes ☒ No		Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
PO #: 808-748-5091 Email: RFENSTEMACHER@hbws.org Project Name: SPECIAL Site:		Project #: 38000519 SSOW#:		Total Number of Containers: 625, 1, 625 1 SIM	
Sample Identification AIEA WELLS P2		Sample Date: 1/15/25 Sample Time: 1030 Sample Type (C=Comp, G=grab): G Matrix (Water, Solid, Other): Drinking Water		Special Instructions/Note:	
FB AIEA WELLS P2		Sample Date: 1/15/25 Sample Time: 1030 Sample Type (C=Comp, G=grab): G Matrix (Water, Solid, Other): Drinking Water		Special Instructions/Note:	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Empty Kit Relinquished by:		Date: 1/15/25 1300		Method of Shipment: FEDEX 7714 5893 1804	
Relinquished by:		Date/Time: 1/15/25 10:28		Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact ☐ Yes ☐ No		Cooler Temperature(s) °C and Other Remarks:		Date/Time: 1/15/25 10:28	

[illegible]



[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-131011-1

SDG Number: Quarterly

Login Number: 131011

List Source: Eurofins Eaton Analytical Pomona

List Number: 1

Creator: Edrosa, Rey

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: 380-131011-1

SDG Number: Quarterly

Login Number: 131011

List Number: 2

Creator: Skinner, Alma D

List Source: Eurofins Calscience

List Creation: 01/20/25 09:08 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-131011-1

SDG Number: Quarterly

Login Number: 131011

List Number: 3

Creator: Trowbridge, Peyton

List Source: Eurofins Eaton Analytical South Bend

List Creation: 01/21/25 12:10 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and 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	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	