

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Quarterly - Ka'amilo Wells

JOB NUMBER

380-116075-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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Authorized for release by
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Definitions/Glossary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Qualifiers

GC/MS VOA

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

GC/MS 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
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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.
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.

General Chemistry

Qualifier	Qualifier Description
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)
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)

Definitions/Glossary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Glossary (Continued)

Abbreviation **These commonly used abbreviations may or may not be present in this report.**

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

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Case Narrative

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

Job ID: 380-116075-1

Job ID: 380-116075-1

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Job Narrative 380-116075-1

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 10/3/2024 9:23 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.9°C and 4.6°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 570-488410. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 625.1_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-488410. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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 spike compounds amount was inadvertently omitted during the extraction process for the matrix spike (MS); therefore, matrix spike recoveries are unavailable for analytical batch 570-489418. The associated laboratory control sample and laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

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

Metals

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.

Eurofins Eaton Analytical Pomona

Case Narrative

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

Job ID: 380-116075-1

Job ID: 380-116075-1 (Continued)

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Detection Summary

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.049		0.0097	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.013		0.0097	ug/L	1		525.2	Total/NA
Chlordane (n.o.s.)	0.17		0.10	ug/L	1		505	Total/NA
Bromide	330		5.0	ug/L	1		300.0	Total/NA
Chloride	130		2.5	mg/L	5		300.0	Total/NA
Nitrate as N	1.5		0.25	mg/L	5		300.0	Total/NA
Sulfate	26		1.3	mg/L	5		300.0	Total/NA
Calcium	22		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	22		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	3.1		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	60		1.0	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.7		1.0	ug/L	1		200.8	Total/NA
Copper	38		2.0	ug/L	1		200.8	Total/NA
Alkalinity	71		2.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	71		2.0	mg/L	1		SM 2320B	Total/NA
Specific Conductance	630		2.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	410		20	mg/L	1		SM 2540C	Total/NA
Fluoride	0.055		0.050	mg/L	1		SM 4500 F C	Total/NA
pH	7.7	HF		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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			10/08/24 20:20	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			10/07/24 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		10/07/24 19:03	1
4-Bromofluorobenzene (Surr)	107		70 - 130		10/07/24 19:03	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		10/07/24 19:03	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			10/08/24 20:20	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:20	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:20	1
1,2,3-Trichlorobenzene	<0.50	^3+	0.50	ug/L			10/08/24 20:20	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,2,4-Trichlorobenzene	<0.50	^3+	0.50	ug/L			10/08/24 20:20	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:20	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/08/24 20:20	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:20	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/08/24 20:20	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/08/24 20:20	1
Acetone	<500		500	ug/L			10/08/24 20:20	1
Benzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromobenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromochloromethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromodichloromethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromoethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromoform	<0.50		0.50	ug/L			10/08/24 20:20	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/08/24 20:20	1
Carbon disulfide	<0.50		0.50	ug/L			10/08/24 20:20	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/08/24 20:20	1
Chlorobenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Chloroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/08/24 20:20	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/08/24 20:20	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:20	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:20	1
Dibromomethane	<0.50		0.50	ug/L			10/08/24 20:20	1

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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			10/08/24 20:20	1
Dichloromethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Diisopropyl ether	<3.0		3.0	ug/L			10/08/24 20:20	1
Ethylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/08/24 20:20	1
Isopropylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
m,p-Xylenes	<0.50		0.50	ug/L			10/08/24 20:20	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/08/24 20:20	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/08/24 20:20	1
Naphthalene	<0.50	^3+	0.50	ug/L			10/08/24 20:20	1
n-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
N-Propylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 20:20	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/08/24 20:20	1
o-Xylene	<0.50		0.50	ug/L			10/08/24 20:20	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 20:20	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/08/24 20:20	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/08/24 20:20	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Styrene	<0.50		0.50	ug/L			10/08/24 20:20	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/08/24 20:20	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/08/24 20:20	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:20	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/08/24 20:20	1
Toluene	<0.50		0.50	ug/L			10/08/24 20:20	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:20	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:20	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/08/24 20:20	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/08/24 20:20	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/08/24 20:20	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/08/24 20:20	1
Xylenes, Total	<0.50		0.50	ug/L			10/08/24 20:20	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/08/24 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		10/08/24 20:20	1
4-Bromofluorobenzene (Surr)	105		70 - 130		10/08/24 20:20	1
Toluene-d8 (Surr)	103		70 - 130		10/08/24 20:20	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		10/06/24 15:36	10/07/24 19:06	1
2,4'-DDE	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
2,4'-DDT	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
4,4'-DDD	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
4,4'-DDE	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Acenaphthene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Acenaphthylene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Acetochlor	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Alachlor	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
alpha-BHC	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
alpha-Chlordane	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Anthracene	<0.019		0.019	ug/L		10/06/24 15:36	10/07/24 19:06	1
Atrazine	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/06/24 15:36	10/07/24 19:06	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/06/24 15:36	10/07/24 19:06	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/06/24 15:36	10/07/24 19:06	1
beta-BHC	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/06/24 15:36	10/07/24 19:06	1
Aldrin	<0.0097		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Bromacil	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Butachlor	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/06/24 15:36	10/07/24 19:06	1
Chlorobenzilate	<0.097	*1	0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Chloroneb	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Chlorpyrifos	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Chrysene	<0.019		0.019	ug/L		10/06/24 15:36	10/07/24 19:06	1
delta-BHC	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Di(2-ethylhexyl)adipate	<0.58	*1	0.58	ug/L		10/06/24 15:36	10/07/24 19:06	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Dieldrin	0.049		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Diethylphthalate	<0.48		0.48	ug/L		10/06/24 15:36	10/07/24 19:06	1
Dimethylphthalate	<0.48		0.48	ug/L		10/06/24 15:36	10/07/24 19:06	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		10/06/24 15:36	10/07/24 19:06	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Endosulfan sulfate	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Endrin	<0.0097		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Endrin aldehyde	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
EPTC	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Fluoranthene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Fluorene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
gamma-BHC (Lindane)	<0.0097		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
gamma-Chlordane	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Heptachlor	<0.0097		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Heptachlor epoxide (isomer B)	0.013		0.0097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Malathion	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Methoxychlor	<0.048	*1	0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Metolachlor	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Molinate	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Naphthalene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Parathion	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Phenanthrene	<0.039		0.039	ug/L		10/06/24 15:36	10/07/24 19:06	1
Propachlor	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Pyrene	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Simazine	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Terbacil	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Terbutylazine	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Thiobencarb	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/06/24 15:36	10/07/24 19:06	1
trans-Nonachlor	<0.048		0.048	ug/L		10/06/24 15:36	10/07/24 19:06	1
Trifluralin	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
1-Methylnaphthalene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1
2-Methylnaphthalene	<0.097		0.097	ug/L		10/06/24 15:36	10/07/24 19:06	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/06/24 15:36	10/07/24 19:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	10/06/24 15:36	10/07/24 19:06	1
Perylene-d12	85		70 - 130	10/06/24 15:36	10/07/24 19:06	1
Triphenylphosphate	104		70 - 130	10/06/24 15:36	10/07/24 19:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
2,4,5-Trichlorophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
2,4,6-Trichlorophenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
2,4-Dichlorophenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
2,4-Dinitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
2,6-Dichlorophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Chloronaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Chlorophenol	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Methylphenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
2-Nitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
3/4-Methylphenol	<2.0		2.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
3-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
4,6-Dinitro-2-methylphenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
4-Chloro-3-methylphenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
4-Chloroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
4-Nitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
Acenaphthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Acenaphthylene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Aniline	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzidine	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzoic acid	<9.9		9.9	ug/L		10/06/24 12:09	10/07/24 11:50	1
Benzyl alcohol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
Bis(2-chloroethoxy)methane	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
bis (2-Chloroisopropyl) ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Chrysene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Dibenzofuran	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Fluorene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Hexachloroethane	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Naphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Nitrobenzene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
N-Nitrosodi-n-propylamine	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
N-Nitrosodiphenylamine	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Pentachlorophenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
Phenanthrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1
Phenol	<0.99		0.99	ug/L		10/06/24 12:09	10/07/24 11:50	1
Pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		28 - 127	10/06/24 12:09	10/07/24 11:50	1
2-Fluorobiphenyl (Surr)	49		31 - 120	10/06/24 12:09	10/07/24 11:50	1
2-Fluorophenol (Surr)	50		17 - 120	10/06/24 12:09	10/07/24 11:50	1
Nitrobenzene-d5 (Surr)	50		27 - 120	10/06/24 12:09	10/07/24 11:50	1
Phenol-d6 (Surr)	31		10 - 120	10/06/24 12:09	10/07/24 11:50	1
p-Terphenyl-d14 (Surr)	54		45 - 120	10/06/24 12:09	10/07/24 11:50	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
Tentatively Identified Compound	None		ug/L			N/A	10/06/24 12:09	10/16/24 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	111		33 - 139	10/06/24 12:09	10/16/24 14:02	1
2-Fluorobiphenyl (Surr)	78		33 - 126	10/06/24 12:09	10/16/24 14:02	1
2-Fluorophenol (Surr)	60		12 - 120	10/06/24 12:09	10/16/24 14:02	1
Nitrobenzene-d5 (Surr)	91		36 - 120	10/06/24 12:09	10/16/24 14:02	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d6 (Surr)	41		10 - 120	10/06/24 12:09	10/16/24 14:02	1
p-Terphenyl-d14 (Surr)	112		47 - 131	10/06/24 12:09	10/16/24 14:02	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			10/11/24 02:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		38 - 134		10/11/24 02:30	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		10/04/24 12:00	10/04/24 22:09	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		10/04/24 12:00	10/04/24 22:09	1
1,2-Dibromoethane	<0.010		0.010	ug/L		10/04/24 12:00	10/04/24 22:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	97		60 - 140	10/04/24 12:00	10/04/24 22:09	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		10/04/24 15:37	10/05/24 00:57	1
Chlordane (n.o.s.)	0.17		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1016	<0.070		0.070	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1221	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1232	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1242	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1248	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1254	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1
PCB-1260	<0.070		0.070	ug/L		10/04/24 15:37	10/05/24 00:57	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		10/04/24 15:37	10/05/24 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		70 - 130	10/04/24 15:37	10/05/24 00:57	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		10/04/24 13:52	10/06/24 11:47	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/04/24 13:52	10/06/24 11:47	1
C8-C18	<25		25	ug/L		10/04/24 13:52	10/06/24 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	123		60 - 130	10/04/24 13:52	10/06/24 11:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10	F1 F2	0.10	mg/L			10/09/24 22:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	100		54 - 120		10/09/24 22:00	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	330		5.0	ug/L			10/04/24 15:00	1
Chloride	130		2.5	mg/L			10/04/24 01:15	5
Nitrate as N	1.5		0.25	mg/L			10/04/24 01:15	5
Nitrite as N	<0.25		0.25	mg/L			10/04/24 01:15	5
Sulfate	26		1.3	mg/L			10/04/24 01:15	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	22		1.0	mg/L			10/04/24 18:35	1
Magnesium	22		0.10	mg/L			10/04/24 18:35	1
Potassium	3.1		1.0	mg/L			10/04/24 18:35	1
Sodium	60		1.0	mg/L			10/04/24 18:35	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			10/04/24 21:37	1
Arsenic	<1.0		1.0	ug/L			10/04/24 21:37	1
Beryllium	<1.0		1.0	ug/L			10/07/24 12:19	1
Cadmium	<0.50		0.50	ug/L			10/04/24 21:37	1
Chromium	1.7		1.0	ug/L			10/04/24 21:37	1
Copper	38		2.0	ug/L			10/04/24 21:37	1
Lead	<0.50		0.50	ug/L			10/04/24 21:37	1
Nickel	<5.0		5.0	ug/L			10/04/24 21:37	1
Selenium	<5.0		5.0	ug/L			10/04/24 21:37	1
Silver	<0.50		0.50	ug/L			10/04/24 21:37	1
Thallium	<1.0		1.0	ug/L			10/04/24 21:37	1
Zinc	<20		20	ug/L			10/04/24 21:37	1

Method: EPA 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10	ug/L		10/14/24 13:26	10/14/24 18:42	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	71		2.0	mg/L			10/04/24 23:30	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	71		2.0	mg/L			10/04/24 23:30	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<2.0		2.0	mg/L			10/04/24 23:30	1
Specific Conductance (SM 2510B)	630		2.0	umhos/cm			10/04/24 23:30	1
Total Dissolved Solids (SM 2540C)	410		20	mg/L			10/04/24 12:40	1
Fluoride (SM 4500 F C)	0.055		0.050	mg/L			10/04/24 21:55	1
pH (SM 4500 H+ B)	7.7	HF		SU			10/04/24 23:30	1
Sulfide (SM 4500 S2 D)	<0.050		0.050	mg/L			10/08/24 16:36	1

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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			10/08/24 20:42	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			10/07/24 19:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		10/07/24 19:26	1
4-Bromofluorobenzene (Surr)	113		70 - 130		10/07/24 19:26	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		10/07/24 19:26	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			10/08/24 20:42	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:42	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:42	1
1,2,3-Trichlorobenzene	<0.50	^3+	0.50	ug/L			10/08/24 20:42	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,2,4-Trichlorobenzene	<0.50	^3+	0.50	ug/L			10/08/24 20:42	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:42	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/08/24 20:42	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 20:42	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/08/24 20:42	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/08/24 20:42	1
Acetone	<500		500	ug/L			10/08/24 20:42	1
Benzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromobenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromochloromethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromodichloromethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromoethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromoform	<0.50		0.50	ug/L			10/08/24 20:42	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/08/24 20:42	1
Carbon disulfide	<0.50		0.50	ug/L			10/08/24 20:42	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/08/24 20:42	1
Chlorobenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Chloroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/08/24 20:42	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/08/24 20:42	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:42	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:42	1
Dibromomethane	<0.50		0.50	ug/L			10/08/24 20:42	1

Client Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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			10/08/24 20:42	1
Dichloromethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Diisopropyl ether	<3.0		3.0	ug/L			10/08/24 20:42	1
Ethylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/08/24 20:42	1
Isopropylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
m,p-Xylenes	<0.50		0.50	ug/L			10/08/24 20:42	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/08/24 20:42	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/08/24 20:42	1
Naphthalene	<0.50	^3+	0.50	ug/L			10/08/24 20:42	1
n-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
N-Propylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 20:42	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/08/24 20:42	1
o-Xylene	<0.50		0.50	ug/L			10/08/24 20:42	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 20:42	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/08/24 20:42	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/08/24 20:42	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Styrene	<0.50		0.50	ug/L			10/08/24 20:42	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/08/24 20:42	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/08/24 20:42	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/08/24 20:42	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/08/24 20:42	1
Toluene	<0.50		0.50	ug/L			10/08/24 20:42	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 20:42	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 20:42	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/08/24 20:42	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/08/24 20:42	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/08/24 20:42	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/08/24 20:42	1
Xylenes, Total	<0.50		0.50	ug/L			10/08/24 20:42	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	61	T J	ug/L		9.17	N/A		10/08/24 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		10/08/24 20:42	1
4-Bromofluorobenzene (Surr)	111		70 - 130		10/08/24 20:42	1
Toluene-d8 (Surr)	103		70 - 130		10/08/24 20:42	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			10/10/24 23:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		38 - 134		10/10/24 23:24	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		10/04/24 12:00	10/04/24 21:27	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		10/04/24 12:00	10/04/24 21:27	1
1,2-Dibromoethane	<0.010		0.010	ug/L		10/04/24 12:00	10/04/24 21:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	108		60 - 140			10/04/24 12:00	10/04/24 21:27	1

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Action Limit Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

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 Org	EPAMCL	EPAMCL	Method	Prep Type
				Limit	Limit	S		
Trihalomethanes, Total	<0.50		ug/L		80		524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200		524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5		524.2	Total/NA
1,1-Dichloroethylene	<0.50		ug/L	7.000	7		524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000			524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50	^3+	ug/L	70.00	70		524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5		524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5		524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5		524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5		524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100		524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70		524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5		524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700		524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600		524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75		524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100		524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Toluene	<0.50		ug/L	1000	1000		524.2	Total/NA
trans-1,2-Dichloroethylene	<0.50		ug/L	100.0	100		524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5		524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2		524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000		524.2	Total/NA
Alachlor	<0.048		ug/L		2		525.2	Total/NA
Atrazine	<0.048		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58	*1	ug/L		400		525.2	Total/NA
Endrin	<0.0097		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.0097		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.0097		ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.013		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L		50		525.2	Total/NA
Methoxychlor	<0.048	*1	ug/L		40		525.2	Total/NA
Simazine	<0.048		ug/L		4		525.2	Total/NA
Benzo[a]pyrene	<0.20		ug/L		0.2		625.1 SIM	Total/NA
Pentachlorophenol	<0.99		ug/L		1		625.1 SIM	Total/NA
1,2,3-Trichloropropane	<0.020		ug/L	0.6000			504.1	Total/NA
1,2-Dibromo-3-Chloropropane	<0.010		ug/L		0.2		504.1	Total/NA
1,2-Dibromoethane	<0.010		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.50		ug/L		3		505	Total/NA
Chlordane (n.o.s.)	0.17		ug/L		2		505	Total/NA
Polychlorinated biphenyls, Total	<0.10		ug/L		0.5		505	Total/NA
Chloride	130		mg/L			250	300.0	Total/NA
Nitrate as N	1.5		mg/L		10		300.0	Total/NA
Nitrite as N	<0.25		mg/L		1		300.0	Total/NA
Sulfate	26		mg/L			250	300.0	Total/NA

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells (Continued)

Lab Sample ID: 380-116075-1

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 Org	EPAMCL	EPAMCL	Method	Prep Type
				Limit	Limit	S		
Antimony	<1.0		ug/L		6		200.8	Total/NA
Arsenic	<1.0		ug/L		10		200.8	Total/NA
Beryllium	<1.0		ug/L		4		200.8	Total/NA
Cadmium	<0.50		ug/L		5		200.8	Total/NA
Chromium	1.7		ug/L		100		200.8	Total/NA
Copper	38		ug/L			1000	200.8	Total/NA
Lead	<0.50		ug/L		15.000		200.8	Total/NA
Selenium	<5.0		ug/L		50		200.8	Total/NA
Silver	<0.50		ug/L			100	200.8	Total/NA
Thallium	<1.0		ug/L		2		200.8	Total/NA
Zinc	<20		ug/L			5000	200.8	Total/NA
Mercury	<0.10		ug/L		2		245.1	Total/NA
Total Dissolved Solids	410		mg/L			500	SM 2540C	Total/NA
Fluoride	0.055		mg/L		4	2	SM 4500 F C	Total/NA
pH	7.7	HF	SU			6.5	SM 4500 H+ B	Total/NA

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

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 Org	EPAMCL	RL	Method	Prep Type
				Limit	Limit			
Trihalomethanes, Total	<0.50		ug/L		80	0.50	524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200	0.50	524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,1-Dichloroethylene	<0.50		ug/L	7.000	7	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000		0.50	524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50	^3+	ug/L	70.00	70	0.50	524.2	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,2-Dichloropropane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Benzene	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Carbon tetrachloride	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Chlorobenzene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70	0.50	524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Ethylbenzene	<0.50		ug/L	700.0	700	0.50	524.2	Total/NA
o-Dichlorobenzene (1,2-DCB)	<0.50		ug/L	600.0	600	0.50	524.2	Total/NA
p-Dichlorobenzene (1,4-DCB)	<0.50		ug/L	75.000	75	0.50	524.2	Total/NA
Styrene	<0.50		ug/L	100.0	100	0.50	524.2	Total/NA
Tetrachloroethene (PCE)	<0.50		ug/L	5.000	5	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	0.50	524.2	Total/NA
Trichloroethylene (TCE)	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
Vinyl Chloride (VC)	<0.30		ug/L	2.000	2	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		0.020	504.1	Total/NA

Eurofins Eaton Analytical Pomona

Action Limit Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: TRAVEL BLANK (Continued)

Lab Sample ID: 380-116075-2

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 Org Limit	EPAMCL Limit	RL	Method	Prep Type
1,2-Dibromo-3-Chloropropane	<0.010		ug/L		0.2	0.010	504.1	Total/NA
1,2-Dibromoethane	<0.010		ug/L		0.05	0.010	504.1	Total/NA

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Surrogate Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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)
380-116075-1	Ka'amilo Wells	100	107	104
380-116075-2	TRAVEL BLANK	100	113	98
LCS 380-112090/2	Lab Control Sample	101	102	101
LCS 380-112090/3	Lab Control Sample Dup	101	108	102
MB 380-112090/5	Method Blank	101	104	99

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 380-112090/4	Lab Control Sample	100	104	101

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)
380-116075-1	Ka'amilo Wells	99	105	103
380-116075-2	TRAVEL BLANK	101	111	103
LCS 380-112293/12	Lab Control Sample	101	103	100
LCS 380-112293/13	Lab Control Sample Dup	101	104	102
MB 380-112293/15	Method Blank	97	105	102
MRL 380-112293/11	Lab Control Sample	101	97	102
MRL 380-112293/14	Lab Control Sample	101	103	104

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)
380-115709-B-1-A MSD	Matrix Spike Duplicate	96	89	103
380-115709-C-1-A MS	Matrix Spike	97	91	105
380-116075-1	Ka'amilo Wells	96	85	104

Surrogate Summary

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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)
LCS 380-111994/23-A	Lab Control Sample	97	84	103
LCS 380-111994/24-A	Lab Control Sample Dup	97	75	103
MB 380-111994/21-A	Method Blank	96	88	105
MRL 380-111994/22-A	Lab Control Sample	96	73	99

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)
380-116075-1	Ka'amilo Wells	111	78	60	91	41	112
MB 570-488410/1-A	Method Blank	96	75	63	81	42	108

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)
 NBZ = Nitrobenzene-d5 (Surr)
 PHL6 = Phenol-d6 (Surr)
 TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		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)
380-116075-1	Ka'amilo Wells	86	49	50	50	31	54
LCS 570-488410/2-A	Lab Control Sample	85	50	57	44	38	56
LCS 570-488410/3-A	Lab Control Sample Dup	83	50	60	45	40	56
MB 570-488410/1-A	Method Blank	79	46	50	47	32	53

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)
380-115753-B-3 MS	Matrix Spike	92

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Surrogate Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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)
380-115753-B-3 MSD	Matrix Spike Duplicate	93
380-116075-1	Ka'amilo Wells	77
380-116075-2	TRAVEL BLANK	79
LCS 570-489970/1010	Lab Control Sample	95
LCSD 570-489970/12	Lab Control Sample Dup	96
MB 570-489970/11	Method Blank	89
MRL 570-489970/1005	Lab Control Sample	79

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)
380-115864-E-1-A MS	Matrix Spike	98
380-115866-B-1-A DU	Duplicate	97
380-116075-1	Ka'amilo Wells	97
380-116075-2	TRAVEL BLANK	108
LCS 380-111778/29-A	Lab Control Sample	99
MBL 380-111778/4-A	Method Blank	98
MRL 380-111778/2-A	Lab Control Sample	101
MRL 380-111778/3-A	Lab Control Sample	102

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)
380-115838-BX-1-B MS	Matrix Spike	91
380-115838-BY-1-B MS	Matrix Spike	93
380-115841-BY-1-B MS	Matrix Spike	90
380-115841-BZ-1-B MS	Matrix Spike	101
380-116075-1	Ka'amilo Wells	92
LCS 380-111931/28-A	Lab Control Sample	98
LCS 380-111931/30-A	Lab Control Sample	98
LCSD 380-111931/29-A	Lab Control Sample Dup	93
MB 380-111931/3-A	Method Blank	95
MRL 380-111931/1-A	Lab Control Sample	98
MRL 380-111931/2-A	Lab Control Sample	100

Surrogate Legend

TCX = Tetrachloro-m-xylene

Surrogate Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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)
380-115753-C-3-A MS	Matrix Spike	111
380-115753-C-3-B MSD	Matrix Spike Duplicate	112
380-116075-1	Ka'amilo Wells	123
LCS 570-488004/2-A	Lab Control Sample	108
LCSD 570-488004/3-A	Lab Control Sample Dup	116
MB 570-488004/1-A	Method Blank	118
MRL 570-488004/4-A	Lab Control Sample	112

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)
380-116075-1	Ka'amilo Wells	100
380-116075-1 MS	Ka'amilo Wells	118
380-116075-1 MSD	Ka'amilo Wells	98
LCS 570-489418/14	Lab Control Sample	103
LCSD 570-489418/15	Lab Control Sample Dup	108
MB 570-489418/10	Method Blank	111
MRL 570-489418/13	Lab Control Sample	131

Surrogate Legend

HF2PP = Hexafluoro-2-propanol (Surr)

QC Sample Results

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 380-112293/15
Matrix: Water
Analysis Batch: 112293

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			10/08/24 19:57	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/08/24 19:57	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/08/24 19:57	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/08/24 19:57	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/08/24 19:57	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/08/24 19:57	1
Acetone	<500		500	ug/L			10/08/24 19:57	1
Benzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromobenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromochloromethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromodichloromethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromoethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromoform	<0.50		0.50	ug/L			10/08/24 19:57	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/08/24 19:57	1
Carbon disulfide	<0.50		0.50	ug/L			10/08/24 19:57	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/08/24 19:57	1
Chlorobenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Chloroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/08/24 19:57	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/08/24 19:57	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 19:57	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 19:57	1
Dibromomethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Dichloromethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Diisopropyl ether	<3.0		3.0	ug/L			10/08/24 19:57	1
Ethylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/08/24 19:57	1
Isopropylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
m,p-Xylenes	<0.50		0.50	ug/L			10/08/24 19:57	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/08/24 19:57	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/08/24 19:57	1
Naphthalene	<0.50		0.50	ug/L			10/08/24 19:57	1
n-Butylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 380-112293/15
Matrix: Water
Analysis Batch: 112293

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			10/08/24 19:57	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 19:57	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/08/24 19:57	1
o-Xylene	<0.50		0.50	ug/L			10/08/24 19:57	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/08/24 19:57	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/08/24 19:57	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/08/24 19:57	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Styrene	<0.50		0.50	ug/L			10/08/24 19:57	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/08/24 19:57	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/08/24 19:57	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/08/24 19:57	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/08/24 19:57	1
Toluene	<0.50		0.50	ug/L			10/08/24 19:57	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/08/24 19:57	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/08/24 19:57	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/08/24 19:57	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/08/24 19:57	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/08/24 19:57	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/08/24 19:57	1
Xylenes, Total	<0.50		0.50	ug/L			10/08/24 19:57	1

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		10/08/24 19:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		10/08/24 19:57	1
4-Bromofluorobenzene (Surr)	105		70 - 130		10/08/24 19:57	1
Toluene-d8 (Surr)	102		70 - 130		10/08/24 19:57	1

Lab Sample ID: LCS 380-112293/12
Matrix: Water
Analysis Batch: 112293

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	4.69		ug/L		94	70 - 130
1,1,1-Trichloroethane	5.00	4.74		ug/L		95	70 - 130
1,1,1,2,2-Tetrachloroethane	5.00	5.59		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	4.78		ug/L		96	70 - 130
1,1-Dichloroethylene	5.00	4.89		ug/L		98	70 - 130
1,1-Dichloroethane	5.00	5.46		ug/L		109	70 - 130
1,1-Dichloropropene	5.00	5.41		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	5.48		ug/L		110	70 - 130
1,2,3-Trichloropropane	5.00	5.46		ug/L		109	70 - 130
1,2,4-Trichlorobenzene	5.00	5.48		ug/L		110	70 - 130
1,2,4-Trimethylbenzene	5.00	5.78		ug/L		116	70 - 130
1,2-Dichloroethane	5.00	5.41		ug/L		108	70 - 130
1,2-Dichloropropane	5.00	5.73		ug/L		115	70 - 130

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 380-112293/12
Matrix: Water
Analysis Batch: 112293

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	5.00	5.90		ug/L		118	70 - 130
1,3-Dichloropropane	5.00	5.35		ug/L		107	70 - 130
1,3-Dichloropropene, Total	10.0	9.59		ug/L		96	70 - 130
2,2-Dichloropropane	5.00	4.88		ug/L		98	70 - 130
2-Butanone (MEK)	50.0	46.8		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	51.0		ug/L		102	70 - 130
Acetone	50.0	49.0	J	ug/L		98	70 - 130
Benzene	5.00	5.60		ug/L		112	70 - 130
Bromobenzene	5.00	5.58		ug/L		112	70 - 130
Bromochloromethane	5.00	5.23		ug/L		105	70 - 130
Bromodichloromethane	5.00	4.36		ug/L		87	70 - 130
Bromoethane	5.00	5.44		ug/L		109	70 - 130
Bromoform	5.00	5.02		ug/L		100	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.06		ug/L		101	70 - 130
Carbon disulfide	5.00	4.83		ug/L		97	70 - 130
Carbon tetrachloride	5.00	4.40		ug/L		88	70 - 130
Chlorobenzene	5.00	5.55		ug/L		111	70 - 130
Chlorodibromomethane	5.00	5.10		ug/L		102	70 - 130
cis-1,3-Dichloropropene	5.00	4.52		ug/L		90	70 - 130
Dichloromethane	5.00	5.14		ug/L		103	70 - 130
Diisopropyl ether	5.00	5.37		ug/L		107	70 - 130
Ethylbenzene	5.00	5.54		ug/L		111	70 - 130
Hexachlorobutadiene	5.00	4.46		ug/L		89	70 - 130
Isopropylbenzene	5.00	5.74		ug/L		115	70 - 130
m,p-Xylenes	10.0	11.1		ug/L		111	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	6.00		ug/L		120	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	5.48		ug/L		110	70 - 130
Naphthalene	5.00	5.64		ug/L		113	70 - 130
n-Butylbenzene	5.00	5.30		ug/L		106	70 - 130
N-Propylbenzene	5.00	5.44		ug/L		109	70 - 130
o-Chlorotoluene	5.00	5.83		ug/L		117	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	5.80		ug/L		116	70 - 130
o-Xylene	5.00	5.44		ug/L		109	70 - 130
p-Chlorotoluene	5.00	5.64		ug/L		113	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	5.83		ug/L		117	70 - 130
p-Isopropyltoluene	5.00	5.59		ug/L		112	70 - 130
sec-Butylbenzene	5.00	5.67		ug/L		113	70 - 130
Styrene	5.00	5.42		ug/L		108	70 - 130
Tert-amyl methyl ether	5.00	5.27		ug/L		105	70 - 130
Tert-butyl ethyl ether	5.00	5.43		ug/L		109	70 - 130
tert-Butylbenzene	5.00	5.54		ug/L		111	70 - 130
Tetrachloroethene (PCE)	5.00	4.36		ug/L		87	70 - 130
Toluene	5.00	5.41		ug/L		108	70 - 130
trans-1,2-Dichloroethylene	5.00	5.27		ug/L		105	70 - 130
trans-1,3-Dichloropropene	5.00	5.07		ug/L		101	70 - 130
Trichloroethylene (TCE)	5.00	5.11		ug/L		102	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	4.37		ug/L		87	70 - 130
Trichlorotrifluoroethane	5.00	4.47		ug/L		89	70 - 130

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 380-112293/12
Matrix: Water
Analysis Batch: 112293

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl Chloride (VC)	5.00	5.14		ug/L		103	70 - 130
Xylenes, Total	15.0	16.6		ug/L		111	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	100		70 - 130

Lab Sample ID: LCSD 380-112293/13
Matrix: Water
Analysis Batch: 112293

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	4.37		ug/L		87	70 - 130	7	20
1,1,1-Trichloroethane	5.00	4.48		ug/L		90	70 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	5.09		ug/L		102	70 - 130	9	20
1,1,2-Trichloroethane	5.00	4.47		ug/L		89	70 - 130	7	20
1,1-Dichlorethylene	5.00	4.59		ug/L		92	70 - 130	6	20
1,1-Dichloroethane	5.00	5.04		ug/L		101	70 - 130	8	20
1,1-Dichloropropene	5.00	4.94		ug/L		99	70 - 130	9	20
1,2,3-Trichlorobenzene	5.00	4.74		ug/L		95	70 - 130	15	20
1,2,3-Trichloropropane	5.00	4.70		ug/L		94	70 - 130	15	20
1,2,4-Trichlorobenzene	5.00	4.82		ug/L		96	70 - 130	13	20
1,2,4-Trimethylbenzene	5.00	5.16		ug/L		103	70 - 130	11	20
1,2-Dichloroethane	5.00	5.05		ug/L		101	70 - 130	7	20
1,2-Dichloropropane	5.00	5.41		ug/L		108	70 - 130	6	20
1,3,5-Trimethylbenzene	5.00	5.22		ug/L		104	70 - 130	12	20
1,3-Dichloropropane	5.00	5.03		ug/L		101	70 - 130	6	20
1,3-Dichloropropene, Total	10.0	8.77		ug/L		88	70 - 130	9	20
2,2-Dichloropropane	5.00	4.26		ug/L		85	70 - 130	14	20
2-Butanone (MEK)	50.0	43.4		ug/L		87	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	50.0	47.8		ug/L		96	70 - 130	6	20
Acetone	50.0	45.1	J	ug/L		90	70 - 130	8	20
Benzene	5.00	5.22		ug/L		104	70 - 130	7	20
Bromobenzene	5.00	5.03		ug/L		101	70 - 130	10	20
Bromochloromethane	5.00	4.88		ug/L		98	70 - 130	7	20
Bromodichloromethane	5.00	4.32		ug/L		86	70 - 130	1	20
Bromoethane	5.00	5.00		ug/L		100	70 - 130	8	20
Bromoform	5.00	4.49		ug/L		90	70 - 130	11	20
Bromomethane (Methyl Bromide)	5.00	4.91		ug/L		98	70 - 130	3	20
Carbon disulfide	5.00	4.58		ug/L		92	70 - 130	5	20
Carbon tetrachloride	5.00	4.25		ug/L		85	70 - 130	3	20
Chlorobenzene	5.00	5.16		ug/L		103	70 - 130	7	20
Chlorodibromomethane	5.00	4.81		ug/L		96	70 - 130	6	20
cis-1,3-Dichloropropene	5.00	4.15		ug/L		83	70 - 130	9	20
Dichloromethane	5.00	4.79		ug/L		96	70 - 130	7	20
Diisopropyl ether	5.00	5.02		ug/L		100	70 - 130	7	20
Ethylbenzene	5.00	5.23		ug/L		105	70 - 130	6	20

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 380-112293/13
Matrix: Water
Analysis Batch: 112293

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
Hexachlorobutadiene	5.00	4.11		ug/L		82	70 - 130	8	20
Isopropylbenzene	5.00	5.20		ug/L		104	70 - 130	10	20
m,p-Xylenes	10.0	10.5		ug/L		105	70 - 130	6	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.31		ug/L		106	70 - 130	12	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.04		ug/L		101	70 - 130	8	20
Naphthalene	5.00	4.98		ug/L		100	70 - 130	12	20
n-Butylbenzene	5.00	4.58		ug/L		92	70 - 130	15	20
N-Propylbenzene	5.00	5.03		ug/L		101	70 - 130	8	20
o-Chlorotoluene	5.00	5.24		ug/L		105	70 - 130	11	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.94		ug/L		99	70 - 130	16	20
o-Xylene	5.00	5.18		ug/L		104	70 - 130	5	20
p-Chlorotoluene	5.00	5.38		ug/L		108	70 - 130	5	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.20		ug/L		104	70 - 130	11	20
p-Isopropyltoluene	5.00	5.02		ug/L		100	70 - 130	11	20
sec-Butylbenzene	5.00	5.01		ug/L		100	70 - 130	12	20
Styrene	5.00	4.99		ug/L		100	70 - 130	8	20
Tert-amyl methyl ether	5.00	4.96		ug/L		99	70 - 130	6	20
Tert-butyl ethyl ether	5.00	5.06		ug/L		101	70 - 130	7	20
tert-Butylbenzene	5.00	4.95		ug/L		99	70 - 130	11	20
Tetrachloroethene (PCE)	5.00	4.13		ug/L		83	70 - 130	5	20
Toluene	5.00	5.15		ug/L		103	70 - 130	5	20
trans-1,2-Dichloroethylene	5.00	4.93		ug/L		99	70 - 130	7	20
trans-1,3-Dichloropropene	5.00	4.62		ug/L		92	70 - 130	9	20
Trichloroethylene (TCE)	5.00	4.65		ug/L		93	70 - 130	9	20
Trichlorofluoromethane (Freon 11)	5.00	4.03		ug/L		81	70 - 130	8	20
Trichlorotrifluoroethane	5.00	4.12		ug/L		82	70 - 130	8	20
Vinyl Chloride (VC)	5.00	4.84		ug/L		97	70 - 130	6	20
Xylenes, Total	15.0	15.7		ug/L		104	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: MRL 380-112293/11
Matrix: Water
Analysis Batch: 112293

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	0.530		ug/L		106	50 - 150
Vinyl Chloride (VC)	0.250	0.213	J	ug/L		85	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	MRL Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Toluene-d8 (Surr)	102		70 - 130

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MRL 380-112293/14
Matrix: Water
Analysis Batch: 112293

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	0.470	J	ug/L		94	50 - 150
1,1,1-Trichloroethane	0.500	0.517		ug/L		103	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.591		ug/L		118	50 - 150
1,1,2-Trichloroethane	0.500	0.575		ug/L		115	50 - 150
1,1-Dichlorethylene	0.500	0.499	J	ug/L		100	50 - 150
1,1-Dichloroethane	0.500	0.573		ug/L		115	50 - 150
1,1-Dichloropropene	0.500	0.529		ug/L		106	50 - 150
1,2,3-Trichlorobenzene	0.500	1.01	^3+	ug/L		201	50 - 150
1,2,3-Trichloropropane	0.500	0.563		ug/L		113	50 - 150
1,2,4-Trichlorobenzene	0.500	0.762	^3+	ug/L		152	50 - 150
1,2,4-Trimethylbenzene	0.500	0.668		ug/L		134	50 - 150
1,2-Dichloroethane	0.500	0.589		ug/L		118	50 - 150
1,2-Dichloropropane	0.500	0.557		ug/L		111	50 - 150
1,3,5-Trimethylbenzene	0.500	0.631		ug/L		126	50 - 150
1,3-Dichloropropane	0.500	0.623		ug/L		125	50 - 150
1,3-Dichloropropene, Total	1.00	0.905		ug/L		91	50 - 150
2,2-Dichloropropane	0.500	0.540		ug/L		108	50 - 150
2-Butanone (MEK)	5.00	5.17		ug/L		103	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.99		ug/L		120	50 - 150
Acetone	5.00	6.85	J	ug/L		137	50 - 150
Benzene	0.500	0.605		ug/L		121	50 - 150
Bromobenzene	0.500	0.573		ug/L		115	50 - 150
Bromochloromethane	0.500	0.528		ug/L		106	50 - 150
Bromodichloromethane	0.500	0.469	J	ug/L		94	50 - 150
Bromoethane	0.500	0.497	J	ug/L		99	50 - 150
Bromoform	0.500	0.670		ug/L		134	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.456	J	ug/L		91	50 - 150
Carbon disulfide	0.500	0.505		ug/L		101	50 - 150
Carbon tetrachloride	0.500	0.421	J	ug/L		84	50 - 150
Chlorobenzene	0.500	0.602		ug/L		120	50 - 150
Chlorodibromomethane	0.500	0.682		ug/L		136	50 - 150
cis-1,3-Dichloropropene	0.500	0.430	J	ug/L		86	50 - 150
Dichloromethane	0.500	0.562		ug/L		112	50 - 150
Diisopropyl ether	0.500	0.593	J	ug/L		119	50 - 150
Ethylbenzene	0.500	0.639		ug/L		128	50 - 150
Hexachlorobutadiene	0.500	0.668		ug/L		134	50 - 150
Isopropylbenzene	0.500	0.634		ug/L		127	50 - 150
m,p-Xylenes	1.00	1.32		ug/L		132	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.671		ug/L		134	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.605		ug/L		121	50 - 150
Naphthalene	0.500	0.889	^3+	ug/L		178	50 - 150
n-Butylbenzene	0.500	0.603		ug/L		121	50 - 150
N-Propylbenzene	0.500	0.627		ug/L		125	50 - 150
o-Chlorotoluene	0.500	0.650		ug/L		130	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.575		ug/L		115	50 - 150
o-Xylene	0.500	0.604		ug/L		121	50 - 150
p-Chlorotoluene	0.500	0.630		ug/L		126	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.628		ug/L		126	50 - 150

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MRL 380-112293/14
Matrix: Water
Analysis Batch: 112293

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	0.643		ug/L		129	50 - 150
Styrene	0.500	0.618		ug/L		124	50 - 150
Tert-amyl methyl ether	0.500	0.595	J	ug/L		119	50 - 150
Tert-butyl ethyl ether	0.500	0.580	J	ug/L		116	50 - 150
tert-Butylbenzene	0.500	0.623		ug/L		125	50 - 150
Tetrachloroethene (PCE)	0.500	0.479	J	ug/L		96	50 - 150
Toluene	0.500	0.587		ug/L		117	50 - 150
trans-1,2-Dichloroethylene	0.500	0.535		ug/L		107	50 - 150
trans-1,3-Dichloropropene	0.500	0.475	J	ug/L		95	50 - 150
Trichloroethylene (TCE)	0.500	0.572		ug/L		114	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.501		ug/L		100	50 - 150
Trichlorotrifluoroethane	0.500	0.525		ug/L		105	50 - 150
Vinyl Chloride (VC)	0.500	0.572		ug/L		114	50 - 150
Xylenes, Total	1.50	1.93		ug/L		128	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	104		70 - 130

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

Lab Sample ID: MB 380-112090/5
Matrix: Water
Analysis Batch: 112090

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			10/07/24 17:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		10/07/24 17:11	1
4-Bromofluorobenzene (Surr)	104		70 - 130		10/07/24 17:11	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		10/07/24 17:11	1

Lab Sample ID: LCS 380-112090/2
Matrix: Water
Analysis Batch: 112090

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	4.11		ug/L		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 380-112090/3
Matrix: Water
Analysis Batch: 112090

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	4.56		ug/L		91	70 - 130	10	20
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
Toluene-d8 (Surr)	101		70 - 130						
4-Bromofluorobenzene (Surr)	108		70 - 130						
1,2-Dichloroethane-d4 (Surr)	102		70 - 130						

Lab Sample ID: MRL 380-112090/4
Matrix: Water
Analysis Batch: 112090

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Tertiary Butyl Alcohol (TBA)	2.00	1.76	J	ug/L		88	50 - 150		
MRL MRL									
Surrogate	%Recovery	Qualifier	Limits						
Toluene-d8 (Surr)	100		50 - 150						
4-Bromofluorobenzene (Surr)	104		50 - 150						
1,2-Dichloroethane-d4 (Surr)	101		50 - 150						

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

Lab Sample ID: MB 380-111994/21-A
Matrix: Water
Analysis Batch: 112221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 111994

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
2,4'-DDE	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
2,4'-DDT	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
4,4'-DDD	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
4,4'-DDE	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
4,4'-DDT	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Acenaphthene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Acenaphthylene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Acetochlor	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Alachlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
alpha-BHC	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
alpha-Chlordane	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Anthracene	<0.019		0.019	ug/L		10/06/24 12:09	10/08/24 10:03	1
Atrazine	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/06/24 12:09	10/08/24 10:03	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/06/24 12:09	10/08/24 10:03	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/06/24 12:09	10/08/24 10:03	1
beta-BHC	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 380-111994/21-A
Matrix: Water
Analysis Batch: 112221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 111994

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/06/24 12:09	10/08/24 10:03	1
Aldrin	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Bromacil	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Butachlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/06/24 12:09	10/08/24 10:03	1
Chlorobenzilate	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Chloroneb	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Chlorpyrifos	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Chrysene	<0.019		0.019	ug/L		10/06/24 12:09	10/08/24 10:03	1
delta-BHC	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/06/24 12:09	10/08/24 10:03	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Dieldrin	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Diethylphthalate	<0.48		0.48	ug/L		10/06/24 12:09	10/08/24 10:03	1
Dimethylphthalate	<0.48		0.48	ug/L		10/06/24 12:09	10/08/24 10:03	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		10/06/24 12:09	10/08/24 10:03	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Endosulfan sulfate	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Endrin	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Endrin aldehyde	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
EPTC	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Fluoranthene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Fluorene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
gamma-BHC (Lindane)	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
gamma-Chlordane	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Heptachlor	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Isophorone	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Malathion	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Methoxychlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Metolachlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Molinate	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Naphthalene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Parathion	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Phenanthrene	<0.039		0.039	ug/L		10/06/24 12:09	10/08/24 10:03	1
Propachlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Pyrene	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Simazine	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Terbacil	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Terbutylazine	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
Thiobencarb	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 380-111994/21-A
Matrix: Water
Analysis Batch: 112221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 111994

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/06/24 12:09	10/08/24 10:03	1
trans-Nonachlor	<0.048		0.048	ug/L		10/06/24 12:09	10/08/24 10:03	1
Trifluralin	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
1-Methylnaphthalene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1
2-Methylnaphthalene	<0.097		0.097	ug/L		10/06/24 12:09	10/08/24 10:03	1

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	10/06/24 12:09	10/08/24 10:03	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	10/06/24 12:09	10/08/24 10:03	1
Perylene-d12	88		70 - 130	10/06/24 12:09	10/08/24 10:03	1
Triphenylphosphate	105		70 - 130	10/06/24 12:09	10/08/24 10:03	1

Lab Sample ID: LCS 380-111994/23-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4'-DDD	1.95	2.01		ug/L		103	70 - 130
2,4'-DDE	1.95	2.07		ug/L		106	70 - 130
2,4'-DDT	1.95	1.82		ug/L		94	70 - 130
2,4-Dinitrotoluene	1.95	1.90		ug/L		98	70 - 130
2,6-Dinitrotoluene	1.95	1.89		ug/L		97	70 - 130
4,4'-DDD	1.95	2.01		ug/L		103	70 - 130
4,4'-DDE	1.95	2.03		ug/L		104	70 - 130
4,4'-DDT	1.95	1.83		ug/L		94	70 - 130
Acenaphthene	1.95	1.95		ug/L		100	70 - 130
Acenaphthylene	1.95	1.77		ug/L		91	70 - 130
Acetochlor	1.95	2.06		ug/L		106	70 - 130
Alachlor	1.95	2.07		ug/L		106	70 - 130
alpha-BHC	1.95	2.00		ug/L		103	70 - 130
alpha-Chlordane	1.95	2.13		ug/L		109	70 - 130
Anthracene	1.95	1.60		ug/L		82	70 - 130
Atrazine	1.95	1.94		ug/L		100	70 - 130
Benz(a)anthracene	1.95	1.80		ug/L		92	70 - 130
Benzo[a]pyrene	1.95	1.58		ug/L		81	70 - 130
Benzo[b]fluoranthene	1.95	1.83		ug/L		94	70 - 130
Benzo[g,h,i]perylene	1.95	1.83		ug/L		94	70 - 130
Benzo[k]fluoranthene	1.95	1.91		ug/L		98	70 - 130
beta-BHC	1.95	2.07		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.77		ug/L		91	70 - 130
Aldrin	1.95	1.53		ug/L		79	70 - 130
Bromacil	1.95	1.86		ug/L		96	70 - 130
Butachlor	1.95	1.88		ug/L		96	70 - 130
Butylbenzylphthalate	1.95	1.92		ug/L		99	70 - 130
Chlorobenzilate	1.95	1.41		ug/L		72	70 - 130
Chloroneb	1.95	1.88		ug/L		97	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 380-111994/23-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorothalonil (Draconil, Bravo)	1.95	2.03		ug/L		105	70 - 130
Chlorpyrifos	1.95	2.12		ug/L		109	70 - 130
Chrysene	1.95	2.00		ug/L		103	70 - 130
delta-BHC	1.95	2.04		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	1.95	1.73		ug/L		89	70 - 130
Dibenz(a,h)anthracene	1.95	1.78		ug/L		91	70 - 130
Diclorvos (DDVP)	1.95	1.78		ug/L		92	70 - 130
Dieldrin	1.95	1.89		ug/L		97	70 - 130
Diethylphthalate	1.95	2.02		ug/L		104	70 - 130
Dimethylphthalate	1.95	1.92		ug/L		99	70 - 130
Di-n-butyl phthalate	3.89	3.98		ug/L		102	70 - 130
Di-n-octyl phthalate	1.95	1.72		ug/L		88	70 - 130
Endosulfan I (Alpha)	1.95	1.96		ug/L		101	70 - 130
Endosulfan II (Beta)	1.95	1.86		ug/L		96	70 - 130
Endosulfan sulfate	1.95	1.85		ug/L		95	70 - 130
Endrin	1.95	2.10		ug/L		108	70 - 130
Endrin aldehyde	1.95	1.81		ug/L		93	60 - 130
EPTC	1.95	1.95		ug/L		100	70 - 130
Fluoranthene	1.95	1.99		ug/L		102	70 - 130
Fluorene	1.95	1.96		ug/L		101	70 - 130
gamma-BHC (Lindane)	1.95	1.97		ug/L		101	70 - 130
gamma-Chlordane	1.95	2.10		ug/L		108	70 - 130
Heptachlor	1.95	1.99		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	1.95	1.98		ug/L		102	70 - 130
Hexachlorobenzene	1.95	1.95		ug/L		100	70 - 130
Hexachlorocyclopentadiene	1.95	1.92		ug/L		99	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	1.53		ug/L		78	70 - 130
Isophorone	1.95	1.83		ug/L		94	70 - 130
Malathion	1.95	1.98		ug/L		101	70 - 130
Methoxychlor	1.95	1.69		ug/L		87	70 - 130
Metolachlor	1.95	2.15		ug/L		111	70 - 130
Molinate	1.95	1.97		ug/L		101	70 - 130
Naphthalene	1.95	1.82		ug/L		94	70 - 130
Parathion	1.95	2.21		ug/L		113	70 - 130
Pendimethalin (Penoxaline)	1.95	1.72		ug/L		88	70 - 130
Phenanthrene	1.95	1.83		ug/L		94	70 - 130
Propachlor	1.95	1.99		ug/L		102	70 - 130
Pyrene	1.95	1.97		ug/L		101	70 - 130
Simazine	1.95	2.03		ug/L		104	70 - 130
Terbacil	1.95	2.13		ug/L		110	70 - 130
Terbutylazine	1.95	2.10		ug/L		108	70 - 130
Thiobencarb	1.95	1.99		ug/L		102	70 - 130
trans-Nonachlor	1.95	2.07		ug/L		107	70 - 130
Trifluralin	1.95	1.62		ug/L		83	70 - 130
1-Methylnaphthalene	1.95	1.88		ug/L		97	70 - 130
2-Methylnaphthalene	1.95	1.84		ug/L		95	70 - 130

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 380-111994/23-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	84		70 - 130
Triphenylphosphate	103		70 - 130

Lab Sample ID: LCSD 380-111994/24-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	1.95	2.00		ug/L		103	70 - 130	0	20
2,4'-DDE	1.95	1.97		ug/L		101	70 - 130	5	20
2,4'-DDT	1.95	1.69		ug/L		87	70 - 130	7	20
2,4-Dinitrotoluene	1.95	1.99		ug/L		102	70 - 130	4	20
2,6-Dinitrotoluene	1.95	2.00		ug/L		102	70 - 130	6	20
4,4'-DDD	1.95	1.97		ug/L		101	70 - 130	2	20
4,4'-DDE	1.95	1.84		ug/L		95	70 - 130	10	20
4,4'-DDT	1.95	1.68		ug/L		86	70 - 130	8	20
Acenaphthene	1.95	1.98		ug/L		101	70 - 130	2	20
Acenaphthylene	1.95	1.78		ug/L		91	70 - 130	0	20
Acetochlor	1.95	2.10		ug/L		108	70 - 130	2	20
Alachlor	1.95	2.12		ug/L		109	70 - 130	2	20
alpha-BHC	1.95	2.03		ug/L		104	70 - 130	1	20
alpha-Chlordane	1.95	2.13		ug/L		109	70 - 130	0	20
Anthracene	1.95	1.62		ug/L		83	70 - 130	1	20
Atrazine	1.95	1.93		ug/L		99	70 - 130	0	20
Benz(a)anthracene	1.95	1.77		ug/L		91	70 - 130	2	20
Benzo[a]pyrene	1.95	1.71		ug/L		88	70 - 130	8	20
Benzo[b]fluoranthene	1.95	2.03		ug/L		104	70 - 130	10	20
Benzo[g,h,i]perylene	1.95	1.64		ug/L		84	70 - 130	11	20
Benzo[k]fluoranthene	1.95	2.01		ug/L		103	70 - 130	5	20
beta-BHC	1.95	2.06		ug/L		106	70 - 130	0	20
Bis(2-ethylhexyl) phthalate	1.95	1.62		ug/L		83	70 - 130	9	20
Aldrin	1.95	1.56		ug/L		80	70 - 130	2	20
Bromacil	1.95	1.95		ug/L		100	70 - 130	4	20
Butachlor	1.95	1.93		ug/L		99	70 - 130	3	20
Butylbenzylphthalate	1.95	1.95		ug/L		100	70 - 130	2	20
Chlorobenzilate	1.95	1.89	*1	ug/L		97	70 - 130	29	20
Chloroneb	1.95	1.92		ug/L		99	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	1.95	2.08		ug/L		107	70 - 130	2	20
Chlorpyrifos	1.95	2.12		ug/L		109	70 - 130	0	20
Chrysene	1.95	2.22		ug/L		114	70 - 130	11	20
delta-BHC	1.95	2.06		ug/L		106	70 - 130	1	20
Di(2-ethylhexyl)adipate	1.95	1.37	*1	ug/L		70	70 - 130	23	20
Dibenz(a,h)anthracene	1.95	1.52		ug/L		78	70 - 130	16	20
Diclorvos (DDVP)	1.95	1.83		ug/L		94	70 - 130	2	20
Dieldrin	1.95	1.98		ug/L		102	70 - 130	5	20
Diethylphthalate	1.95	2.05		ug/L		105	70 - 130	2	20
Dimethylphthalate	1.95	1.95		ug/L		100	70 - 130	2	20

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 380-111994/24-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Di-n-butyl phthalate	3.89	3.99		ug/L		102	70 - 130	0	20	
Di-n-octyl phthalate	1.95	1.46		ug/L		75	70 - 130	16	20	
Endosulfan I (Alpha)	1.95	1.99		ug/L		102	70 - 130	2	20	
Endosulfan II (Beta)	1.95	1.94		ug/L		100	70 - 130	4	20	
Endosulfan sulfate	1.95	1.89		ug/L		97	70 - 130	2	20	
Endrin	1.95	2.11		ug/L		109	70 - 130	1	20	
Endrin aldehyde	1.95	1.84		ug/L		95	60 - 130	2	20	
EPTC	1.95	1.97		ug/L		101	70 - 130	1	20	
Fluoranthene	1.95	2.05		ug/L		106	70 - 130	3	20	
Fluorene	1.95	1.99		ug/L		102	70 - 130	2	20	
gamma-BHC (Lindane)	1.95	1.95		ug/L		100	70 - 130	1	20	
gamma-Chlordane	1.95	2.05		ug/L		105	70 - 130	2	20	
Heptachlor	1.95	1.99		ug/L		102	70 - 130	0	20	
Heptachlor epoxide (isomer B)	1.95	2.00		ug/L		103	70 - 130	1	20	
Hexachlorobenzene	1.95	1.96		ug/L		101	70 - 130	1	20	
Hexachlorocyclopentadiene	1.95	1.94		ug/L		100	70 - 130	1	20	
Indeno[1,2,3-cd]pyrene	1.95	1.41		ug/L		72	70 - 130	8	20	
Isophorone	1.95	1.86		ug/L		95	70 - 130	1	20	
Malathion	1.95	2.05		ug/L		105	70 - 130	4	20	
Methoxychlor	1.95	2.10	*1	ug/L		108	70 - 130	21	20	
Metolachlor	1.95	2.19		ug/L		113	70 - 130	2	20	
Molinate	1.95	1.97		ug/L		101	70 - 130	0	20	
Naphthalene	1.95	1.86		ug/L		96	70 - 130	2	20	
Parathion	1.95	2.28		ug/L		117	70 - 130	3	20	
Pendimethalin (Penoxaline)	1.95	1.78		ug/L		91	70 - 130	3	20	
Phenanthrene	1.95	1.89		ug/L		97	70 - 130	3	20	
Propachlor	1.95	2.03		ug/L		104	70 - 130	2	20	
Pyrene	1.95	2.02		ug/L		104	70 - 130	2	20	
Simazine	1.95	2.02		ug/L		104	70 - 130	1	20	
Terbacil	1.95	2.20		ug/L		113	70 - 130	3	20	
Terbutylazine	1.95	2.12		ug/L		109	70 - 130	1	20	
Thiobencarb	1.95	2.04		ug/L		105	70 - 130	2	20	
trans-Nonachlor	1.95	2.00		ug/L		103	70 - 130	4	20	
Trifluralin	1.95	1.70		ug/L		87	70 - 130	5	20	
1-Methylnaphthalene	1.95	1.93		ug/L		99	70 - 130	3	20	
2-Methylnaphthalene	1.95	1.87		ug/L		96	70 - 130	1	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	75		70 - 130
Triphenylphosphate	103		70 - 130

Lab Sample ID: MRL 380-111994/22-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
2,4'-DDD	0.0975	0.0902	J	ug/L		93	50 - 150	

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MRL 380-111994/22-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDE	0.0975	0.0995		ug/L		102	50 - 150
2,4'-DDT	0.0975	0.0965	J	ug/L		99	50 - 150
2,4-Dinitrotoluene	0.0975	0.107		ug/L		110	50 - 150
2,6-Dinitrotoluene	0.0975	0.109		ug/L		112	50 - 150
4,4'-DDD	0.0975	0.0972		ug/L		100	50 - 150
4,4'-DDE	0.0975	0.0991		ug/L		102	50 - 150
4,4'-DDT	0.0975	0.0958	J	ug/L		98	50 - 150
Acenaphthene	0.0975	0.0967	J	ug/L		99	50 - 150
Acenaphthylene	0.0975	0.0819	J	ug/L		84	50 - 150
Acetochlor	0.0975	0.110		ug/L		113	50 - 150
Alachlor	0.0487	0.0510		ug/L		105	50 - 150
alpha-BHC	0.0975	0.105		ug/L		108	50 - 150
alpha-Chlordane	0.0244	<0.028		ug/L		101	50 - 150
Anthracene	0.0195	0.0195		ug/L		100	50 - 150
Atrazine	0.0487	0.0509		ug/L		104	50 - 150
Benz(a)anthracene	0.0487	0.0482	J	ug/L		99	50 - 150
Benzo[a]pyrene	0.0195	0.0155	J	ug/L		80	50 - 150
Benzo[b]fluoranthene	0.0195	0.0169	J	ug/L		87	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0339	J	ug/L		70	50 - 150
Benzo[k]fluoranthene	0.0195	0.0177	J	ug/L		91	50 - 150
beta-BHC	0.0975	0.110		ug/L		113	50 - 150
Bis(2-ethylhexyl) phthalate	0.585	0.514	J	ug/L		88	50 - 150
Aldrin	0.00975	<0.0097		ug/L		87	50 - 150
Bromacil	0.0975	0.0969	J	ug/L		99	50 - 150
Butachlor	0.0487	0.0599		ug/L		123	50 - 150
Butylbenzylphthalate	0.487	0.465	J	ug/L		95	50 - 150
Chlorobenzilate	0.0975	0.0849	J	ug/L		87	50 - 150
Chloroneb	0.0975	0.0834	J	ug/L		86	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0975	0.106		ug/L		109	50 - 150
Chlorpyrifos	0.0487	0.0507		ug/L		104	50 - 150
Chrysene	0.0195	0.0216		ug/L		111	50 - 150
delta-BHC	0.0975	0.109		ug/L		112	50 - 150
Di(2-ethylhexyl)adipate	0.585	0.505	J	ug/L		86	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0342	J	ug/L		70	50 - 150
Diclorvos (DDVP)	0.0487	0.0493		ug/L		101	50 - 150
Dieldrin	0.00975	0.0128		ug/L		132	50 - 150
Diethylphthalate	0.487	0.503		ug/L		103	50 - 150
Dimethylphthalate	0.487	0.488	J	ug/L		100	50 - 150
Di-n-butyl phthalate	0.487	0.475	J	ug/L		97	49 - 243
Di-n-octyl phthalate	0.0975	0.0644	J	ug/L		66	50 - 150
Endosulfan I (Alpha)	0.0975	0.0887	J	ug/L		91	50 - 150
Endosulfan II (Beta)	0.0975	0.111		ug/L		114	50 - 150
Endosulfan sulfate	0.0975	0.0938	J	ug/L		96	50 - 150
Endrin	0.00975	0.0110		ug/L		112	50 - 150
Endrin aldehyde	0.0975	0.0889	J	ug/L		91	50 - 150
EPTC	0.0975	0.0910	J	ug/L		93	50 - 150
Fluoranthene	0.0975	0.0931	J	ug/L		96	50 - 150
Fluorene	0.0487	0.0505		ug/L		104	50 - 150
gamma-BHC (Lindane)	0.00975	0.0141		ug/L		144	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MRL 380-111994/22-A
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
gamma-Chlordane	0.0244	0.0241	J	ug/L		99	50 - 150
Heptachlor	0.00975	0.0114		ug/L		117	50 - 150
Heptachlor epoxide (isomer B)	0.00975	0.0140		ug/L		144	50 - 150
Hexachlorobenzene	0.0487	0.0487	J	ug/L		100	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0463	J	ug/L		95	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0269	J	ug/L		55	50 - 150
Isophorone	0.0975	0.110		ug/L		112	50 - 150
Malathion	0.0975	0.105		ug/L		107	50 - 150
Methoxychlor	0.0487	0.0585		ug/L		120	50 - 150
Metolachlor	0.0487	0.0537		ug/L		110	50 - 150
Molinate	0.0975	0.0959	J	ug/L		98	50 - 150
Naphthalene	0.0975	0.103		ug/L		105	50 - 150
Parathion	0.0975	0.101		ug/L		104	50 - 150
Pendimethalin (Penoxaline)	0.0975	0.0791	J	ug/L		81	50 - 150
Phenanthrene	0.0390	0.0418		ug/L		107	50 - 150
Propachlor	0.0487	0.0528		ug/L		108	50 - 150
Pyrene	0.0487	0.0454	J	ug/L		93	50 - 150
Simazine	0.0487	0.0461	J	ug/L		95	50 - 150
Terbacil	0.0975	0.104		ug/L		107	50 - 150
Terbutylazine	0.0975	0.0992		ug/L		102	50 - 150
Thiobencarb	0.0975	0.0931	J	ug/L		95	50 - 150
trans-Nonachlor	0.0244	<0.025		ug/L		90	50 - 150
Trifluralin	0.0975	0.0873	J	ug/L		90	50 - 150
1-Methylnaphthalene	0.0975	0.102		ug/L		105	50 - 150
2-Methylnaphthalene	0.0975	0.0960	J	ug/L		98	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	73		70 - 130
Triphenylphosphate	99		70 - 130

Lab Sample ID: 380-115709-B-1-A MSD
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	<0.097		1.96	2.08		ug/L		106	70 - 130	1	20
2,4'-DDE	<0.097		1.96	2.11		ug/L		108	70 - 130	2	20
2,4'-DDT	<0.097		1.96	1.94		ug/L		99	70 - 130	3	20
2,4-Dinitrotoluene	<0.097		1.96	2.14		ug/L		109	70 - 130	0	20
2,6-Dinitrotoluene	<0.097		1.96	2.07		ug/L		106	70 - 130	1	20
4,4'-DDD	<0.097		1.96	2.07		ug/L		106	70 - 130	1	20
4,4'-DDE	<0.097		1.96	2.06		ug/L		105	70 - 130	3	20
4,4'-DDT	<0.097		1.96	1.98		ug/L		101	70 - 130	2	20
Acenaphthene	<0.097		1.96	2.00		ug/L		102	70 - 130	0	20
Acenaphthylene	<0.097		1.96	1.86		ug/L		95	70 - 130	1	20
Acetochlor	<0.097		1.96	2.15		ug/L		110	70 - 130	1	20
Alachlor	<0.049		1.96	2.11		ug/L		108	70 - 130	1	20

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115709-B-1-A MSD
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
alpha-BHC	<0.097		1.96	2.06		ug/L		105	70 - 130	1	20
alpha-Chlordane	<0.049		1.96	2.19		ug/L		112	70 - 130	2	20
Anthracene	<0.019	F1	1.96	1.24	F1	ug/L		63	70 - 130	9	20
Atrazine	<0.049		1.96	1.97		ug/L		101	70 - 130	2	20
Benz(a)anthracene	<0.049		1.96	1.81		ug/L		92	70 - 130	1	20
Benzo[a]pyrene	<0.019		1.96	1.57		ug/L		80	70 - 130	4	20
Benzo[b]fluoranthene	<0.019		1.96	1.96		ug/L		100	70 - 130	0	20
Benzo[g,h,i]perylene	<0.049		1.96	1.93		ug/L		99	70 - 130	1	20
Benzo[k]fluoranthene	<0.019		1.96	1.98		ug/L		101	70 - 130	1	20
beta-BHC	<0.097		1.96	2.12		ug/L		108	70 - 130	0	20
Bis(2-ethylhexyl) phthalate	<0.58		1.96	1.67		ug/L		85	70 - 130	4	20
Aldrin	<0.0097		1.96	1.65		ug/L		84	70 - 130	3	20
Bromacil	<0.097		1.96	1.99		ug/L		102	70 - 130	3	20
Butachlor	<0.049		1.96	1.96		ug/L		100	70 - 130	0	20
Butylbenzylphthalate	<0.49		1.96	1.97		ug/L		100	70 - 130	0	20
Chlorobenzilate	<0.097	*1	1.96	1.90		ug/L		97	70 - 130	2	20
Chloroneb	<0.097		1.96	1.96		ug/L		100	70 - 130	1	20
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	2.08		ug/L		106	70 - 130	2	20
Chlorpyrifos	<0.049		1.96	2.17		ug/L		111	70 - 130	0	20
Chrysene	<0.019		1.96	2.04		ug/L		104	70 - 130	1	20
delta-BHC	<0.097		1.96	2.07		ug/L		106	70 - 130	2	20
Di(2-ethylhexyl)adipate	<0.58	*1	1.96	1.69		ug/L		86	70 - 130	5	20
Dibenz(a,h)anthracene	<0.049		1.96	1.86		ug/L		95	70 - 130	1	20
Diclorvos (DDVP)	<0.049		1.96	1.89		ug/L		96	70 - 130	1	20
Dieldrin	<0.0097		1.96	2.02		ug/L		103	70 - 130	0	20
Diethylphthalate	<0.49		1.96	2.07		ug/L		106	70 - 130	0	20
Dimethylphthalate	<0.49		1.96	1.97		ug/L		101	70 - 130	0	20
Di-n-butyl phthalate	<0.97		3.92	4.03		ug/L		103	70 - 130	1	20
Di-n-octyl phthalate	<0.097		1.96	1.55		ug/L		79	70 - 130	10	20
Endosulfan I (Alpha)	<0.097		1.96	2.04		ug/L		104	70 - 130	1	20
Endosulfan II (Beta)	<0.097		1.96	2.00		ug/L		102	70 - 130	1	20
Endosulfan sulfate	<0.097		1.96	1.99		ug/L		101	70 - 130	1	20
Endrin	<0.0097		1.96	2.15		ug/L		110	70 - 130	0	20
Endrin aldehyde	<0.097		1.96	1.75		ug/L		89	60 - 130	3	20
EPTC	<0.097		1.96	1.98		ug/L		101	70 - 130	1	20
Fluoranthene	<0.097		1.96	2.05		ug/L		105	70 - 130	1	20
Fluorene	<0.049		1.96	2.03		ug/L		103	70 - 130	1	20
gamma-BHC (Lindane)	<0.0097		1.96	2.00		ug/L		102	70 - 130	0	20
gamma-Chlordane	<0.049		1.96	2.18		ug/L		111	70 - 130	2	20
Heptachlor	<0.0097		1.96	2.01		ug/L		102	70 - 130	1	20
Heptachlor epoxide (isomer B)	<0.0097		1.96	2.04		ug/L		104	70 - 130	2	20
Hexachlorobenzene	<0.049		1.96	2.04		ug/L		104	70 - 130	0	20
Hexachlorocyclopentadiene	<0.049		1.96	2.07		ug/L		106	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.71		ug/L		87	70 - 130	2	20
Isophorone	<0.097		1.96	1.87		ug/L		96	70 - 130	1	20
Malathion	<0.097		1.96	2.06		ug/L		105	70 - 130	1	20
Methoxychlor	<0.049	*1	1.96	1.88		ug/L		96	70 - 130	0	20
Metolachlor	<0.049		1.96	2.21		ug/L		113	70 - 130	1	20
Molinate	<0.097		1.96	1.99		ug/L		102	70 - 130	0	20

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115709-B-1-A MSD
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Naphthalene	<0.097		1.96	1.87		ug/L		95	70 - 130	1	20
Parathion	<0.097		1.96	2.42		ug/L		123	70 - 130	1	20
Pendimethalin (Penoxaline)	<0.097		1.96	1.96		ug/L		100	70 - 130	2	20
Phenanthrene	<0.039		1.96	1.88		ug/L		96	70 - 130	0	20
Propachlor	<0.049		1.96	2.02		ug/L		103	70 - 130	1	20
Pyrene	<0.049		1.96	2.01		ug/L		103	70 - 130	0	20
Simazine	<0.049		1.96	2.10		ug/L		107	70 - 130	0	20
Terbacil	<0.097		1.96	2.28		ug/L		117	70 - 130	2	20
Terbutylazine	<0.097		1.96	2.17		ug/L		111	70 - 130	1	20
Thiobencarb	<0.097		1.96	2.01		ug/L		103	70 - 130	1	20
trans-Nonachlor	<0.049		1.96	2.16		ug/L		110	70 - 130	3	20
Trifluralin	<0.097		1.96	1.81		ug/L		93	70 - 130	1	20
1-Methylnaphthalene	<0.097		1.96	1.93		ug/L		98	70 - 130	0	20
2-Methylnaphthalene	<0.097		1.96	1.89		ug/L		96	70 - 130	0	20
				MSD	MSD						
Surrogate				%Recovery	Qualifier				Limits		
2-Nitro-m-xylene				96					70 - 130		
Perylene-d12				89					70 - 130		
Triphenylphosphate				103					70 - 130		

Lab Sample ID: 380-115709-C-1-A MS
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,4'-DDD	<0.097		1.96	2.11		ug/L		107	70 - 130		
2,4'-DDE	<0.097		1.96	2.14		ug/L		109	70 - 130		
2,4'-DDT	<0.097		1.96	2.00		ug/L		102	70 - 130		
2,4-Dinitrotoluene	<0.097		1.96	2.14		ug/L		109	70 - 130		
2,6-Dinitrotoluene	<0.097		1.96	2.09		ug/L		106	70 - 130		
4,4'-DDD	<0.097		1.96	2.08		ug/L		106	70 - 130		
4,4'-DDE	<0.097		1.96	2.12		ug/L		108	70 - 130		
4,4'-DDT	<0.097		1.96	2.02		ug/L		103	70 - 130		
Acenaphthene	<0.097		1.96	2.00		ug/L		102	70 - 130		
Acenaphthylene	<0.097		1.96	1.83		ug/L		93	70 - 130		
Acetochlor	<0.097		1.96	2.13		ug/L		109	70 - 130		
Alachlor	<0.049		1.96	2.14		ug/L		109	70 - 130		
alpha-BHC	<0.097		1.96	2.04		ug/L		104	70 - 130		
alpha-Chlordane	<0.049		1.96	2.23		ug/L		114	70 - 130		
Anthracene	<0.019	F1	1.96	1.13	F1	ug/L		58	70 - 130		
Atrazine	<0.049		1.96	2.01		ug/L		103	70 - 130		
Benz(a)anthracene	<0.049		1.96	1.82		ug/L		93	70 - 130		
Benzo[a]pyrene	<0.019		1.96	1.52		ug/L		77	70 - 130		
Benzo[b]fluoranthene	<0.019		1.96	1.95		ug/L		99	70 - 130		
Benzo[g,h,i]perylene	<0.049		1.96	1.92		ug/L		98	70 - 130		
Benzo[k]fluoranthene	<0.019		1.96	2.00		ug/L		102	70 - 130		
beta-BHC	<0.097		1.96	2.12		ug/L		108	70 - 130		
Bis(2-ethylhexyl) phthalate	<0.58		1.96	1.74		ug/L		88	70 - 130		

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115709-C-1-A MS
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Aldrin	<0.0097		1.96	1.61		ug/L		82	70 - 130
Bromacil	<0.097		1.96	2.05		ug/L		104	70 - 130
Butachlor	<0.049		1.96	1.96		ug/L		100	70 - 130
Butylbenzylphthalate	<0.49		1.96	1.96		ug/L		100	70 - 130
Chlorobenzilate	<0.097	*1	1.96	1.85		ug/L		95	70 - 130
Chloroneb	<0.097		1.96	1.97		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	2.12		ug/L		108	70 - 130
Chlorpyrifos	<0.049		1.96	2.16		ug/L		110	70 - 130
Chrysene	<0.019		1.96	2.03		ug/L		104	70 - 130
delta-BHC	<0.097		1.96	2.12		ug/L		108	70 - 130
Di(2-ethylhexyl)adipate	<0.58	*1	1.96	1.78		ug/L		91	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.88		ug/L		96	70 - 130
Diclorvos (DDVP)	<0.049		1.96	1.88		ug/L		96	70 - 130
Dieldrin	<0.0097		1.96	2.01		ug/L		103	70 - 130
Diethylphthalate	<0.49		1.96	2.06		ug/L		105	70 - 130
Dimethylphthalate	<0.49		1.96	1.97		ug/L		100	70 - 130
Di-n-butyl phthalate	<0.97		3.92	4.01		ug/L		102	70 - 130
Di-n-octyl phthalate	<0.097		1.96	1.70		ug/L		87	70 - 130
Endosulfan I (Alpha)	<0.097		1.96	2.01		ug/L		103	70 - 130
Endosulfan II (Beta)	<0.097		1.96	1.98		ug/L		101	70 - 130
Endosulfan sulfate	<0.097		1.96	2.01		ug/L		102	70 - 130
Endrin	<0.0097		1.96	2.14		ug/L		109	70 - 130
Endrin aldehyde	<0.097		1.96	1.80		ug/L		92	60 - 130
EPTC	<0.097		1.96	1.99		ug/L		101	70 - 130
Fluoranthene	<0.097		1.96	2.08		ug/L		106	70 - 130
Fluorene	<0.049		1.96	2.02		ug/L		103	70 - 130
gamma-BHC (Lindane)	<0.0097		1.96	2.01		ug/L		103	70 - 130
gamma-Chlordane	<0.049		1.96	2.22		ug/L		113	70 - 130
Heptachlor	<0.0097		1.96	2.03		ug/L		104	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.96	2.08		ug/L		106	70 - 130
Hexachlorobenzene	<0.049		1.96	2.04		ug/L		104	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.05		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.74		ug/L		89	70 - 130
Isophorone	<0.097		1.96	1.85		ug/L		95	70 - 130
Malathion	<0.097		1.96	2.09		ug/L		106	70 - 130
Methoxychlor	<0.049	*1	1.96	1.88		ug/L		96	70 - 130
Metolachlor	<0.049		1.96	2.23		ug/L		114	70 - 130
Molinate	<0.097		1.96	2.00		ug/L		102	70 - 130
Naphthalene	<0.097		1.96	1.85		ug/L		95	70 - 130
Parathion	<0.097		1.96	2.45		ug/L		125	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.96	2.01		ug/L		102	70 - 130
Phenanthrene	<0.039		1.96	1.88		ug/L		96	70 - 130
Propachlor	<0.049		1.96	2.04		ug/L		104	70 - 130
Pyrene	<0.049		1.96	2.02		ug/L		103	70 - 130
Simazine	<0.049		1.96	2.10		ug/L		107	70 - 130
Terbacil	<0.097		1.96	2.25		ug/L		115	70 - 130
Terbutylazine	<0.097		1.96	2.19		ug/L		112	70 - 130
Thiobencarb	<0.097		1.96	2.04		ug/L		104	70 - 130
trans-Nonachlor	<0.049		1.96	2.23		ug/L		114	70 - 130

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115709-C-1-A MS
Matrix: Water
Analysis Batch: 112094

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Trifluralin	<0.097		1.96	1.83		ug/L		93	70 - 130
1-Methylnaphthalene	<0.097		1.96	1.92		ug/L		98	70 - 130
2-Methylnaphthalene	<0.097		1.96	1.88		ug/L		96	70 - 130
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
2-Nitro-m-xylene	97		70 - 130						
Perylene-d12	91		70 - 130						
Triphenylphosphate	105		70 - 130						

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

Lab Sample ID: MB 570-488410/1-A
Matrix: Water
Analysis Batch: 492026

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488410

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac	
Tentatively Identified Compound	None		ug/L			N/A	10/06/24 12:09	10/16/24 13:39	1	
MB MB										
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
2,4,6-Tribromophenol (Surr)	96		33 - 139			10/06/24 12:09	10/16/24 13:39	1		
2-Fluorobiphenyl (Surr)	75		33 - 126			10/06/24 12:09	10/16/24 13:39	1		
2-Fluorophenol (Surr)	63		12 - 120			10/06/24 12:09	10/16/24 13:39	1		
Nitrobenzene-d5 (Surr)	81		36 - 120			10/06/24 12:09	10/16/24 13:39	1		
Phenol-d6 (Surr)	42		10 - 120			10/06/24 12:09	10/16/24 13:39	1		
p-Terphenyl-d14 (Surr)	108		47 - 131			10/06/24 12:09	10/16/24 13:39	1		

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

Lab Sample ID: MB 570-488410/1-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488410

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
2,4,5-Trichlorophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2,4-Dichlorophenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2,4-Dinitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2,6-Dichlorophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Chloronaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Chlorophenol	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Methylphenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
2-Nitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
3/4-Methylphenol	<2.0		2.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
3-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
4,6-Dinitro-2-methylphenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 570-488410/1-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488410

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
4-Chloro-3-methylphenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
4-Chloroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
4-Chlorophenyl phenyl ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
4-Nitroaniline	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
4-Nitrophenol	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
Acenaphthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Acenaphthylene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Aniline	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzidine	<5.0		5.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzoic acid	<10		10	ug/L		10/06/24 12:09	10/07/24 10:22	1
Benzyl alcohol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
Bis(2-chloroethoxy)methane	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Bis(2-chloroethyl)ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
bis (2-Chloroisopropyl) ether	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Chrysene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Dibenzofuran	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Fluoranthene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Fluorene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Hexachloroethane	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Naphthalene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Nitrobenzene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
N-Nitrosodi-n-propylamine	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
N-Nitrosodiphenylamine	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Pentachlorophenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
Phenanthrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1
Phenol	<1.0		1.0	ug/L		10/06/24 12:09	10/07/24 10:22	1
Pyrene	<0.20		0.20	ug/L		10/06/24 12:09	10/07/24 10:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	79		28 - 127	10/06/24 12:09	10/07/24 10:22	1
2-Fluorobiphenyl (Surr)	46		31 - 120	10/06/24 12:09	10/07/24 10:22	1
2-Fluorophenol (Surr)	50		17 - 120	10/06/24 12:09	10/07/24 10:22	1
Nitrobenzene-d5 (Surr)	47		27 - 120	10/06/24 12:09	10/07/24 10:22	1
Phenol-d6 (Surr)	32		10 - 120	10/06/24 12:09	10/07/24 10:22	1
p-Terphenyl-d14 (Surr)	53		45 - 120	10/06/24 12:09	10/07/24 10:22	1

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 570-488410/2-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	13.0		ug/L		65	47 - 120
2,4,5-Trichlorophenol	20.0	17.1		ug/L		86	57 - 120
2,4,6-Trichlorophenol	20.0	17.2		ug/L		86	52 - 129
2,4-Dichlorophenol	20.0	14.3		ug/L		72	53 - 122
2,4-Dinitrophenol	20.0	16.7		ug/L		84	1 - 173
2,6-Dichlorophenol	20.0	14.1		ug/L		70	50 - 120
2-Chloronaphthalene	20.0	16.4		ug/L		82	65 - 120
2-Chlorophenol	20.0	15.8		ug/L		79	36 - 120
2-Methylnaphthalene	20.0	12.8		ug/L		64	43 - 120
2-Methylphenol	20.0	14.8		ug/L		74	46 - 120
2-Nitroaniline	20.0	17.9		ug/L		90	51 - 125
2-Nitrophenol	20.0	13.6		ug/L		68	45 - 167
3/4-Methylphenol	40.0	27.3		ug/L		68	29 - 120
3-Nitroaniline	20.0	17.7		ug/L		89	62 - 129
4,6-Dinitro-2-methylphenol	20.0	15.5		ug/L		77	53 - 130
4-Bromophenyl phenyl ether	20.0	15.5		ug/L		78	65 - 120
4-Chloro-3-methylphenol	20.0	14.6		ug/L		73	41 - 128
4-Chloroaniline	20.0	13.9		ug/L		69	51 - 120
4-Chlorophenyl phenyl ether	20.0	16.1		ug/L		80	38 - 145
4-Nitroaniline	20.0	17.3		ug/L		86	64 - 129
4-Nitrophenol	20.0	8.91		ug/L		45	13 - 129
Acenaphthene	20.0	15.5		ug/L		77	60 - 132
Acenaphthylene	20.0	16.7		ug/L		83	54 - 126
Aniline	20.0	17.1		ug/L		85	52 - 121
Anthracene	20.0	16.9		ug/L		84	43 - 120
Benzidine	20.0	9.35		ug/L		47	20 - 164
Benzo[a]anthracene	20.0	16.8		ug/L		84	42 - 133
Benzo[a]pyrene	20.0	16.8		ug/L		84	32 - 148
Benzo[b]fluoranthene	20.0	16.1		ug/L		80	42 - 140
Benzo[g,h,i]perylene	20.0	16.7		ug/L		83	1 - 195
Benzo[k]fluoranthene	20.0	16.9		ug/L		85	25 - 146
Benzoic acid	20.0	7.25	J	ug/L		36	20 - 120
Benzyl alcohol	20.0	14.5		ug/L		73	44 - 122
Bis(2-chloroethoxy)methane	20.0	14.0		ug/L		70	49 - 165
Bis(2-chloroethyl)ether	20.0	15.8		ug/L		79	43 - 126
bis (2-Chloroisopropyl) ether	20.0	16.1		ug/L		81	63 - 139
Chrysene	20.0	15.9		ug/L		80	44 - 140
Dibenz(a,h)anthracene	20.0	17.0		ug/L		85	1 - 200
Dibenzofuran	20.0	16.5		ug/L		83	48 - 120
Fluoranthene	20.0	17.2		ug/L		86	43 - 121
Fluorene	20.0	16.2		ug/L		81	70 - 120
Hexachloroethane	20.0	12.2		ug/L		61	55 - 120
Indeno[1,2,3-cd]pyrene	20.0	16.5		ug/L		82	1 - 151
Naphthalene	20.0	13.1		ug/L		65	36 - 120
Nitrobenzene	20.0	13.7		ug/L		68	54 - 158
N-Nitrosodi-n-propylamine	20.0	14.9		ug/L		75	14 - 198
N-Nitrosodiphenylamine	20.0	20.1		ug/L		100	65 - 133
Pentachlorophenol	20.0	15.4		ug/L		77	38 - 152

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 570-488410/2-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488410

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	16.6		ug/L		83	65 - 120
Phenol	20.0	7.97		ug/L		40	17 - 120
Pyrene	20.0	16.8		ug/L		84	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	85		28 - 127
2-Fluorobiphenyl (Surr)	50		31 - 120
2-Fluorophenol (Surr)	57		17 - 120
Nitrobenzene-d5 (Surr)	44		27 - 120
Phenol-d6 (Surr)	38		10 - 120
p-Terphenyl-d14 (Surr)	56		45 - 120

Lab Sample ID: LCSD 570-488410/3-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 488410

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	13.4		ug/L		67	47 - 120	3	20
2,4,5-Trichlorophenol	20.0	17.4		ug/L		87	57 - 120	2	20
2,4,6-Trichlorophenol	20.0	17.4		ug/L		87	52 - 129	1	35
2,4-Dichlorophenol	20.0	14.9		ug/L		74	53 - 122	4	30
2,4-Dinitrophenol	20.0	15.7		ug/L		78	1 - 173	6	79
2,6-Dichlorophenol	20.0	14.6		ug/L		73	50 - 120	4	20
2-Chloronaphthalene	20.0	16.8		ug/L		84	65 - 120	3	15
2-Chlorophenol	20.0	16.9		ug/L		85	36 - 120	7	37
2-Methylnaphthalene	20.0	13.3		ug/L		67	43 - 120	4	20
2-Methylphenol	20.0	16.0		ug/L		80	46 - 120	8	20
2-Nitroaniline	20.0	17.2		ug/L		86	51 - 125	4	20
2-Nitrophenol	20.0	13.9		ug/L		69	45 - 167	2	33
3/4-Methylphenol	40.0	29.8		ug/L		74	29 - 120	9	20
3-Nitroaniline	20.0	17.0		ug/L		85	62 - 129	4	20
4,6-Dinitro-2-methylphenol	20.0	15.0		ug/L		75	53 - 130	3	122
4-Bromophenyl phenyl ether	20.0	15.8		ug/L		79	65 - 120	2	26
4-Chloro-3-methylphenol	20.0	14.6		ug/L		73	41 - 128	0	44
4-Chloroaniline	20.0	14.5		ug/L		73	51 - 120	4	20
4-Chlorophenyl phenyl ether	20.0	16.4		ug/L		82	38 - 145	2	36
4-Nitroaniline	20.0	15.8		ug/L		79	64 - 129	9	20
4-Nitrophenol	20.0	8.19		ug/L		41	13 - 129	8	79
Acenaphthene	20.0	15.7		ug/L		78	60 - 132	1	29
Acenaphthylene	20.0	16.4		ug/L		82	54 - 126	1	45
Aniline	20.0	18.8		ug/L		94	52 - 121	10	21
Anthracene	20.0	16.9		ug/L		85	43 - 120	0	40
Benzidine	20.0	11.2		ug/L		56	20 - 164	18	30
Benzo[a]anthracene	20.0	16.7		ug/L		83	42 - 133	1	32
Benzo[a]pyrene	20.0	16.8		ug/L		84	32 - 148	0	43
Benzo[b]fluoranthene	20.0	16.1		ug/L		80	42 - 140	0	43
Benzo[g,h,i]perylene	20.0	16.5		ug/L		83	1 - 195	1	61
Benzo[k]fluoranthene	20.0	16.6		ug/L		83	25 - 146	2	38

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 570-488410/3-A
Matrix: Water
Analysis Batch: 488516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 488410

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzoic acid	20.0	7.10	J	ug/L		36	20 - 120	2	30
Benzyl alcohol	20.0	15.3		ug/L		77	44 - 122	5	20
Bis(2-chloroethoxy)methane	20.0	14.4		ug/L		72	49 - 165	3	32
Bis(2-chloroethyl)ether	20.0	16.6		ug/L		83	43 - 126	5	65
bis (2-Chloroisopropyl) ether	20.0	17.1		ug/L		85	63 - 139	6	46
Chrysene	20.0	15.9		ug/L		79	44 - 140	0	53
Dibenz(a,h)anthracene	20.0	16.6		ug/L		83	1 - 200	2	75
Dibenzofuran	20.0	16.6		ug/L		83	48 - 120	0	20
Fluoranthene	20.0	16.6		ug/L		83	43 - 121	4	40
Fluorene	20.0	16.1		ug/L		81	70 - 120	0	23
Hexachloroethane	20.0	13.1		ug/L		65	55 - 120	6	32
Indeno[1,2,3-cd]pyrene	20.0	16.2		ug/L		81	1 - 151	2	60
Naphthalene	20.0	13.5		ug/L		68	36 - 120	3	39
Nitrobenzene	20.0	13.9		ug/L		70	54 - 158	2	37
N-Nitrosodi-n-propylamine	20.0	15.5		ug/L		77	14 - 198	3	52
N-Nitrosodiphenylamine	20.0	20.0		ug/L		100	65 - 133	0	20
Pentachlorophenol	20.0	15.3		ug/L		76	38 - 152	1	52
Phenanthrene	20.0	16.7		ug/L		83	65 - 120	1	24
Phenol	20.0	8.48		ug/L		42	17 - 120	6	39
Pyrene	20.0	16.8		ug/L		84	70 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	83		28 - 127
2-Fluorobiphenyl (Surr)	50		31 - 120
2-Fluorophenol (Surr)	60		17 - 120
Nitrobenzene-d5 (Surr)	45		27 - 120
Phenol-d6 (Surr)	40		10 - 120
p-Terphenyl-d14 (Surr)	56		45 - 120

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

Lab Sample ID: MB 570-489970/11
Matrix: Water
Analysis Batch: 489970

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			10/10/24 17:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		10/10/24 17:53	1

Lab Sample ID: LCS 570-489970/1010
Matrix: Water
Analysis Batch: 489970

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	427		ug/L		107	78 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 570-489970/1010
Matrix: Water
Analysis Batch: 489970

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

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

Lab Sample ID: LCSD 570-489970/12
Matrix: Water
Analysis Batch: 489970

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

	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
<i>Analyte</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>
Gasoline Range Organics (C4-C13)	400	397		ug/L		99	78 - 120	7	10

	LCSD	LCSD	Limits
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	96		38 - 134

Lab Sample ID: MRL 570-489970/1005
Matrix: Water
Analysis Batch: 489970

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

	Spike	MRL	MRL	Unit	D	%Rec	%Rec	Limits
<i>Analyte</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>Limits</i>
Gasoline Range Organics (C4-C13)	10.0	10.7		ug/L		107	50 - 150	

	MRL	MRL	Limits
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	79		38 - 134

Lab Sample ID: 380-115753-B-3 MS
Matrix: Water
Analysis Batch: 489970

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

	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>Limits</i>
Gasoline Range Organics (C4-C13)	<10		400	404		ug/L		101	68 - 122	

	MS	MS	Limits
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	92		38 - 134

Lab Sample ID: 380-115753-B-3 MSD
Matrix: Water
Analysis Batch: 489970

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

	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD
<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>Added</i>	<i>Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>Limits</i>	<i>RPD</i>	<i>Limit</i>	<i>Limit</i>
Gasoline Range Organics (C4-C13)	<10		400	406		ug/L		101	68 - 122	0	18	

	MSD	MSD	Limits
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
4-Bromofluorobenzene (Surr)	93		38 - 134

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MBL 380-111778/4-A
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 111778

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		10/04/24 12:00	10/04/24 14:39	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		10/04/24 12:00	10/04/24 14:39	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		10/04/24 12:00	10/04/24 14:39	1
Surrogate	MBL %Recovery	MBL Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	98		60 - 140			10/04/24 12:00	10/04/24 14:39	1

Lab Sample ID: LCS 380-111778/29-A
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111778

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
1,2-Dibromo-3-Chloropropane	0.200	0.202		ug/L		101	70 - 130
1,2-Dibromoethane	0.200	0.218		ug/L		109	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,2-Dibromopropane (Surr)	99		60 - 140				

Lab Sample ID: MRL 380-111778/2-A
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111778

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.0200	0.0178	J	ug/L		89	60 - 140
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
1,2-Dibromopropane (Surr)	101		60 - 140				

Lab Sample ID: MRL 380-111778/3-A
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111778

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.0500	0.0507		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	0.0100	0.0109		ug/L		109	60 - 140
1,2-Dibromoethane	0.0100	0.00980	J	ug/L		98	60 - 140
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
1,2-Dibromopropane (Surr)	102		60 - 140				

Lab Sample ID: 380-115864-E-1-A MS
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111778

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.22	1.20		ug/L		99	65 - 135

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115864-E-1-A MS
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111778

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier		Result	Qualifier					
1,2-Dibromo-3-Chloropropane	<0.0099		0.244	0.243		ug/L		100		65 - 135
1,2-Dibromoethane	<0.0099		0.244	0.263		ug/L		108		65 - 135
MS MS										
Surrogate	%Recovery	Qualifier	Limits							
1,2-Dibromopropane (Surr)	98		60 - 140							

Lab Sample ID: 380-115866-B-1-A DU
Matrix: Water
Analysis Batch: 111970

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 111778

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier		Result				
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
DU DU								
Surrogate	%Recovery	Qualifier	Limits					
1,2-Dibromopropane (Surr)	97		60 - 140					

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MB 380-111931/3-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 111931

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Toxaphene	<0.50		0.50	ug/L		10/04/24 15:37	10/04/24 18:12	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1016	<0.070		0.070	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1221	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1232	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1242	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1248	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1254	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
PCB-1260	<0.070		0.070	ug/L		10/04/24 15:37	10/04/24 18:12	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		10/04/24 15:37	10/04/24 18:12	1
MB MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
Tetrachloro-m-xylene	95		70 - 130	10/04/24 15:37	10/04/24 18:12	1		

Lab Sample ID: LCS 380-111931/28-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Added	Result					
Toxaphene	2.50	2.79		ug/L		112		70 - 130
LCS LCS								
Surrogate	%Recovery	Qualifier	Limits					
Tetrachloro-m-xylene	98		70 - 130					

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: LCS 380-111931/30-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.500	0.482		ug/L		96	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
Tetrachloro-m-xylene	98		70 - 130				

Lab Sample ID: LCSD 380-111931/29-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	2.50	2.58		ug/L		103	70 - 130	8	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
Tetrachloro-m-xylene	93		70 - 130						

Lab Sample ID: MRL 380-111931/1-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	0.500	0.550		ug/L		110	50 - 150
Surrogate	%Recovery	MRL Qualifier	Limits				
Tetrachloro-m-xylene	98		70 - 130				

Lab Sample ID: MRL 380-111931/2-A
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.100	0.0925	J	ug/L		93	50 - 150
Surrogate	%Recovery	MRL Qualifier	Limits				
Tetrachloro-m-xylene	100		70 - 130				

Lab Sample ID: 380-115838-BX-1-B MS
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.51		2.52	2.76		ug/L		109	65 - 135
Surrogate	%Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	91		70 - 130						

QC Sample Results

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115838-BY-1-B MS
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chlordane (n.o.s.)	<0.10		0.503	0.466		ug/L		93		65 - 135
		<i>MS</i>		<i>MS</i>						
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>							
<i>Tetrachloro-m-xylene</i>	93		70 - 130							

Lab Sample ID: 380-115841-BY-1-B MS
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Toxaphene	<0.51		2.53	2.72		ug/L		108		65 - 135
		<i>MS</i>		<i>MS</i>						
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>							
<i>Tetrachloro-m-xylene</i>	90		70 - 130							

Lab Sample ID: 380-115841-BZ-1-B MS
Matrix: Water
Analysis Batch: 111937

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 111931

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chlordane (n.o.s.)	<0.10		0.510	0.490		ug/L		96		65 - 135
		<i>MS</i>		<i>MS</i>						
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>							
<i>Tetrachloro-m-xylene</i>	101		70 - 130							

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

Lab Sample ID: MB 570-488004/1-A
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 488004

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		10/04/24 13:52	10/06/24 06:58	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/04/24 13:52	10/06/24 06:58	1
C8-C18	<25		25	ug/L		10/04/24 13:52	10/06/24 06:58	1
		<i>MB</i>						
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>n-Octacosane (Surr)</i>	118		60 - 130			10/04/24 13:52	10/06/24 06:58	1

Lab Sample ID: LCS 570-488004/2-A
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488004

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
		Result	Qualifier					
C10-C28	1600	1160		ug/L		72		56 - 127

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 570-488004/2-A
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488004

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	108		60 - 130

Lab Sample ID: LCSD 570-488004/3-A
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 488004

	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	1600	1210		ug/L		76	56 - 127	5	23
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									
	LCSD %Recovery	LCSD Qualifier				Limits			
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	116					60 - 130			

Lab Sample ID: MRL 570-488004/4-A
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 488004

	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte C10-C28	0.0200	0.0222	J	mg/L		111	50 - 150		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									
	MRL %Recovery	MRL Qualifier				Limits			
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	112					60 - 130			

Lab Sample ID: 380-115753-C-3-A MS
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 488004

	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte C10-C28	<26		1630	1320		ug/L		81	70 - 130		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											
	MS %Recovery	MS Qualifier				Limits					
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	111					60 - 130					

Lab Sample ID: 380-115753-C-3-B MSD
Matrix: Water
Analysis Batch: 488344

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 488004

	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	<26		1630	1380		ug/L		85	70 - 130	5	20
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											
	MSD %Recovery	MSD Qualifier				Limits					
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	112					60 - 130					

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: MB 570-489418/10
Matrix: Water
Analysis Batch: 489418

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			10/09/24 19:50	1	
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	111		54 - 120					10/09/24 19:50	1

Lab Sample ID: LCS 570-489418/14
Matrix: Water
Analysis Batch: 489418

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	2.10		mg/L		105	78 - 131
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Hexafluoro-2-propanol (Surr)	103		54 - 120				

Lab Sample ID: LCSD 570-489418/15
Matrix: Water
Analysis Batch: 489418

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
Ethanol	2.00	2.11		mg/L		105	78 - 131	0	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Hexafluoro-2-propanol (Surr)	108		54 - 120						

Lab Sample ID: MRL 570-489418/13
Matrix: Water
Analysis Batch: 489418

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	0.104		mg/L		104	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
Hexafluoro-2-propanol (Surr)	131		54 - 120				

Lab Sample ID: 380-116075-1 MS
Matrix: Water
Analysis Batch: 489418

Client Sample ID: Ka'amilo Wells
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	<0.10	F1 F2	2.00	0.131	F1	mg/L		7	20 - 173
Surrogate	MS %Recovery	MS Qualifier	Limits						
Hexafluoro-2-propanol (Surr)	118		54 - 120						

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-116075-1 MSD
Matrix: Water
Analysis Batch: 489418

Client Sample ID: Ka'amilo Wells
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	F1 F2	2.00	2.04	F2	mg/L		102	20 - 173	176	21
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
Hexafluoro-2-propanol (Surr)	98		54 - 120								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-111721/4
Matrix: Water
Analysis Batch: 111721

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.050		0.050	mg/L			10/03/24 18:03	1
Nitrite as N	<0.050		0.050	mg/L			10/03/24 18:03	1

Lab Sample ID: LCS 380-111721/7
Matrix: Water
Analysis Batch: 111721

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	2.50	2.41		mg/L		96	90 - 110
Nitrite as N	1.00	0.996		mg/L		100	90 - 110

Lab Sample ID: LCSD 380-111721/8
Matrix: Water
Analysis Batch: 111721

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
Nitrate as N	2.50	2.40		mg/L		96	90 - 110	0	20
Nitrite as N	1.00	0.993		mg/L		99	90 - 110	0	20

Lab Sample ID: MRL 380-111721/5
Matrix: Water
Analysis Batch: 111721

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.0125	0.0128	J	mg/L		102	50 - 150
Nitrite as N	0.0125	0.0115	J	mg/L		92	50 - 150

Lab Sample ID: MRL 380-111721/6
Matrix: Water
Analysis Batch: 111721

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Nitrate as N	0.0500	0.0466	J	mg/L		93	50 - 150
Nitrite as N	0.0500	0.0478	J	mg/L		96	50 - 150

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-115741-A-1 MS
Matrix: Water
Analysis Batch: 111721

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
Nitrate as N	0.12		1.25	1.35		mg/L		98	80 - 120
Nitrite as N	<0.050		0.500	0.501		mg/L		100	80 - 120

Lab Sample ID: 380-115741-A-1 MSD
Matrix: Water
Analysis Batch: 111721

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
Nitrate as N	0.12		1.25	1.33		mg/L		96	80 - 120	2	20
Nitrite as N	<0.050		0.500	0.493		mg/L		99	80 - 120	2	20

Lab Sample ID: MB 380-111722/4
Matrix: Water
Analysis Batch: 111722

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			10/03/24 18:03	1
Sulfate	<0.25		0.25	mg/L			10/03/24 18:03	1

Lab Sample ID: LCS 380-111722/7
Matrix: Water
Analysis Batch: 111722

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	24.9		mg/L		100	90 - 110
Sulfate	50.0	49.4		mg/L		99	90 - 110

Lab Sample ID: LCSD 380-111722/8
Matrix: Water
Analysis Batch: 111722

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	24.9		mg/L		100	90 - 110	0	20
Sulfate	50.0	49.4		mg/L		99	90 - 110	0	20

Lab Sample ID: MRL 380-111722/5
Matrix: Water
Analysis Batch: 111722

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	0.124	J	mg/L		100	50 - 150
Sulfate	0.250	0.236	J	mg/L		95	50 - 150

Lab Sample ID: MRL 380-111722/6
Matrix: Water
Analysis Batch: 111722

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	0.438	J	mg/L		88	50 - 150
Sulfate	0.999	0.930		mg/L		93	50 - 150

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QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 380-115741-A-1 MS
Matrix: Water
Analysis Batch: 111722

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	5.5		12.5	18.5		mg/L		104	80 - 120
Sulfate	1.3		25.0	26.3		mg/L		100	80 - 120

Lab Sample ID: 380-115741-A-1 MSD
Matrix: Water
Analysis Batch: 111722

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	5.5		12.5	18.3		mg/L		102	80 - 120	1	20
Sulfate	1.3		25.0	26.0		mg/L		99	80 - 120	1	20

Lab Sample ID: MB 380-111865/6
Matrix: Water
Analysis Batch: 111865

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			10/04/24 02:55	1

Lab Sample ID: LCS 380-111865/7
Matrix: Water
Analysis Batch: 111865

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	100	96.7		ug/L		97	90 - 110

Lab Sample ID: LCSD 380-111865/8
Matrix: Water
Analysis Batch: 111865

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	96.2		ug/L		96	90 - 110	1	10

Lab Sample ID: MRL 380-111865/5
Matrix: Water
Analysis Batch: 111865

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	4.98	J	ug/L		100	75 - 125

Lab Sample ID: 380-115932-C-7 MS
Matrix: Water
Analysis Batch: 111865

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	<5.0		50.0	48.6		ug/L		97	80 - 120

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-115932-C-7 MSD
Matrix: Water
Analysis Batch: 111865

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	<5.0		50.0	48.6		ug/L		97	80 - 120	0	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 380-112065/119
Matrix: Water
Analysis Batch: 112065

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<1.0		1.0	mg/L			10/04/24 18:06	1
Magnesium	<0.10		0.10	mg/L			10/04/24 18:06	1
Potassium	<1.0		1.0	mg/L			10/04/24 18:06	1
Sodium	<1.0		1.0	mg/L			10/04/24 18:06	1

Lab Sample ID: LCS 380-112065/123
Matrix: Water
Analysis Batch: 112065

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	50.5		mg/L		101	85 - 115
Magnesium	20.0	19.7		mg/L		99	85 - 115
Potassium	20.0	19.9		mg/L		99	85 - 115
Sodium	50.0	49.0		mg/L		98	85 - 115

Lab Sample ID: LCSD 380-112065/124
Matrix: Water
Analysis Batch: 112065

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	50.4		mg/L		101	85 - 115	0	20
Magnesium	20.0	19.8		mg/L		99	85 - 115	0	20
Potassium	20.0	20.0		mg/L		100	85 - 115	1	20
Sodium	50.0	49.2		mg/L		98	85 - 115	1	20

Lab Sample ID: LLCS 380-112065/122
Matrix: Water
Analysis Batch: 112065

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	1.01		mg/L		101	50 - 150
Magnesium	0.100	0.0947	J	mg/L		95	50 - 150
Potassium	1.00	0.744	J	mg/L		74	50 - 150
Sodium	1.00	1.00		mg/L		100	50 - 150

Lab Sample ID: 380-116024-A-3 MS
Matrix: Water
Analysis Batch: 112065

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	39		50.0	90.7		mg/L		103	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 380-116024-A-3 MS
Matrix: Water
Analysis Batch: 112065

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
Magnesium	8.9		20.0	29.7		mg/L		104	70 - 130
Potassium	4.0		20.0	26.2		mg/L		111	70 - 130
Sodium	30		50.0	79.6		mg/L		100	70 - 130

Lab Sample ID: 380-116024-A-3 MSD
Matrix: Water
Analysis Batch: 112065

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	39		50.0	89.4		mg/L		100	70 - 130	1	20
Magnesium	8.9		20.0	29.3		mg/L		102	70 - 130	2	20
Potassium	4.0		20.0	25.9		mg/L		109	70 - 130	1	20
Sodium	30		50.0	78.5		mg/L		98	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MBL 380-111925/234
Matrix: Water
Analysis Batch: 111925

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			10/04/24 21:00	1
Arsenic	<0.49		1.0	ug/L			10/04/24 21:00	1
Cadmium	<0.081		0.50	ug/L			10/04/24 21:00	1
Chromium	<0.80		1.0	ug/L			10/04/24 21:00	1
Copper	<0.27		2.0	ug/L			10/04/24 21:00	1
Lead	<0.29		0.50	ug/L			10/04/24 21:00	1
Nickel	<0.38		5.0	ug/L			10/04/24 21:00	1
Selenium	<1.0		5.0	ug/L			10/04/24 21:00	1
Silver	<0.40		0.50	ug/L			10/04/24 21:00	1
Thallium	<0.32		1.0	ug/L			10/04/24 21:00	1
Zinc	<4.3		20	ug/L			10/04/24 21:00	1

Lab Sample ID: LCS 380-111925/237
Matrix: Water
Analysis Batch: 111925

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	50.9		ug/L		102	85 - 115
Arsenic	50.0	49.4		ug/L		99	85 - 115
Cadmium	50.0	49.1		ug/L		98	85 - 115
Chromium	50.0	49.6		ug/L		99	85 - 115
Copper	50.0	49.9		ug/L		100	85 - 115
Lead	50.0	50.1		ug/L		100	85 - 115
Nickel	50.0	50.8		ug/L		102	85 - 115
Selenium	50.0	53.1		ug/L		106	85 - 115
Silver	50.0	49.1		ug/L		98	85 - 115
Thallium	50.0	49.8		ug/L		100	85 - 115
Zinc	50.0	50.0		ug/L		100	85 - 115

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 380-111925/238
Matrix: Water
Analysis Batch: 111925

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	51.0		ug/L		102	85 - 115	0	20
Arsenic	50.0	49.6		ug/L		99	85 - 115	0	20
Cadmium	50.0	49.8		ug/L		100	85 - 115	1	20
Chromium	50.0	50.0		ug/L		100	85 - 115	1	20
Copper	50.0	50.4		ug/L		101	85 - 115	1	20
Lead	50.0	49.3		ug/L		99	85 - 115	2	20
Nickel	50.0	51.3		ug/L		103	85 - 115	1	20
Selenium	50.0	53.0		ug/L		106	85 - 115	0	20
Silver	50.0	50.3		ug/L		101	85 - 115	2	20
Thallium	50.0	49.1		ug/L		98	85 - 115	1	20
Zinc	50.0	50.6		ug/L		101	85 - 115	1	20

Lab Sample ID: LLCS 380-111925/236
Matrix: Water
Analysis Batch: 111925

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	1.06		ug/L		106	50 - 150
Arsenic	1.00	1.02		ug/L		102	50 - 150
Cadmium	0.500	0.501		ug/L		100	50 - 150
Chromium	1.00	<0.80		ug/L		76	50 - 150
Copper	2.00	1.98	J	ug/L		99	50 - 150
Lead	0.500	0.412	J	ug/L		82	50 - 150
Nickel	5.00	5.00		ug/L		100	50 - 150
Selenium	5.00	5.23		ug/L		105	50 - 150
Silver	0.500	0.490	J	ug/L		98	50 - 150
Thallium	1.00	0.901	J	ug/L		90	50 - 150
Zinc	20.0	19.8	J	ug/L		99	50 - 150

Lab Sample ID: 380-116010-A-4 MS
Matrix: Water
Analysis Batch: 111925

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	51.3		ug/L		103	70 - 130
Arsenic	<1.0		50.0	53.0		ug/L		105	70 - 130
Cadmium	<0.50		50.0	51.6		ug/L		103	70 - 130
Chromium	11		50.0	59.6		ug/L		98	70 - 130
Copper	<2.0		50.0	50.6		ug/L		99	70 - 130
Lead	<0.50		50.0	49.1		ug/L		98	70 - 130
Nickel	<5.0		50.0	50.3		ug/L		101	70 - 130
Selenium	<5.0		50.0	58.8		ug/L		118	70 - 130
Silver	<0.50	F1 F2	50.0	43.4		ug/L		87	70 - 130
Thallium	<1.0		50.0	49.2		ug/L		98	70 - 130
Zinc	<20		50.0	52.7		ug/L		105	70 - 130

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-116010-A-4 MSD
Matrix: Water
Analysis Batch: 111925

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

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Antimony	<1.0		50.0	51.3		ug/L		103	70 - 130	0	20
Arsenic	<1.0		50.0	52.3		ug/L		103	70 - 130	1	20
Cadmium	<0.50		50.0	50.2		ug/L		100	70 - 130	3	20
Chromium	11		50.0	59.1		ug/L		97	70 - 130	1	20
Copper	<2.0		50.0	49.6		ug/L		97	70 - 130	2	20
Lead	<0.50		50.0	48.9		ug/L		98	70 - 130	0	20
Nickel	<5.0		50.0	49.5		ug/L		99	70 - 130	2	20
Selenium	<5.0		50.0	58.4		ug/L		117	70 - 130	1	20
Silver	<0.50	F1 F2	50.0	29.4	F1 F2	ug/L		59	70 - 130	38	20
Thallium	<1.0		50.0	48.6		ug/L		97	70 - 130	1	20
Zinc	<20		50.0	51.6		ug/L		103	70 - 130	2	20

Lab Sample ID: MBL 380-112119/16
Matrix: Water
Analysis Batch: 112119

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

Analyte	MBL	MBL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Antimony	<0.48		1.0	ug/L			10/07/24 11:26	1
Arsenic	<0.49		1.0	ug/L			10/07/24 11:26	1
Beryllium	<0.18		1.0	ug/L			10/07/24 11:26	1
Cadmium	<0.081		0.50	ug/L			10/07/24 11:26	1
Chromium	<0.80		1.0	ug/L			10/07/24 11:26	1
Copper	<0.27		2.0	ug/L			10/07/24 11:26	1
Lead	<0.29		0.50	ug/L			10/07/24 11:26	1
Nickel	<0.38		5.0	ug/L			10/07/24 11:26	1
Selenium	<1.0		5.0	ug/L			10/07/24 11:26	1
Silver	<0.40		0.50	ug/L			10/07/24 11:26	1
Thallium	<0.32		1.0	ug/L			10/07/24 11:26	1
Zinc	<4.3		20	ug/L			10/07/24 11:26	1

Lab Sample ID: LCS 380-112119/19
Matrix: Water
Analysis Batch: 112119

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Antimony	50.0	51.1		ug/L		102	85 - 115
Arsenic	50.0	49.8		ug/L		100	85 - 115
Beryllium	50.0	50.5		ug/L		101	85 - 115
Cadmium	50.0	49.5		ug/L		99	85 - 115
Chromium	50.0	50.8		ug/L		102	85 - 115
Copper	50.0	49.8		ug/L		100	85 - 115
Lead	50.0	50.0		ug/L		100	85 - 115
Nickel	50.0	50.7		ug/L		101	85 - 115
Selenium	50.0	50.5		ug/L		101	85 - 115
Silver	50.0	49.7		ug/L		99	85 - 115
Thallium	50.0	49.3		ug/L		99	85 - 115
Zinc	50.0	49.9		ug/L		100	85 - 115

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCSD 380-112119/20
Matrix: Water
Analysis Batch: 112119

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	51.8		ug/L		104	85 - 115	1	20
Arsenic	50.0	50.1		ug/L		100	85 - 115	0	20
Beryllium	50.0	50.6		ug/L		101	85 - 115	0	20
Cadmium	50.0	49.5		ug/L		99	85 - 115	0	20
Chromium	50.0	50.2		ug/L		100	85 - 115	1	20
Copper	50.0	49.7		ug/L		99	85 - 115	0	20
Lead	50.0	50.7		ug/L		101	85 - 115	1	20
Nickel	50.0	50.7		ug/L		101	85 - 115	0	20
Selenium	50.0	50.4		ug/L		101	85 - 115	0	20
Silver	50.0	49.9		ug/L		100	85 - 115	0	20
Thallium	50.0	50.5		ug/L		101	85 - 115	2	20
Zinc	50.0	49.8		ug/L		100	85 - 115	0	20

Lab Sample ID: LLCS 380-112119/18
Matrix: Water
Analysis Batch: 112119

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	1.04		ug/L		104	50 - 150
Arsenic	1.00	1.14		ug/L		114	50 - 150
Beryllium	1.00	0.966	J	ug/L		97	50 - 150
Cadmium	0.500	0.459	J	ug/L		92	50 - 150
Chromium	1.00	0.981	J	ug/L		98	50 - 150
Copper	2.00	2.02		ug/L		101	50 - 150
Lead	0.500	0.479	J	ug/L		96	50 - 150
Nickel	5.00	4.94	J	ug/L		99	50 - 150
Selenium	5.00	4.94	J	ug/L		99	50 - 150
Silver	0.500	0.486	J	ug/L		97	50 - 150
Thallium	1.00	0.961	J	ug/L		96	50 - 150
Zinc	20.0	19.5	J	ug/L		98	50 - 150

Lab Sample ID: 380-116082-D-1 MS
Matrix: Water
Analysis Batch: 112119

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	50.6		ug/L		101	70 - 130
Arsenic	<1.0		50.0	52.7		ug/L		105	70 - 130
Beryllium	<1.0		50.0	49.5		ug/L		99	70 - 130
Cadmium	<0.50		50.0	52.4		ug/L		105	70 - 130
Chromium	2.4		50.0	54.1		ug/L		103	70 - 130
Copper	2.9		50.0	51.9		ug/L		98	70 - 130
Lead	<0.50		50.0	51.1		ug/L		102	70 - 130
Nickel	<5.0		50.0	50.4		ug/L		101	70 - 130
Selenium	<5.0		50.0	55.9		ug/L		109	70 - 130
Silver	<0.50	F1	50.0	11.7	F1	ug/L		23	70 - 130
Thallium	<1.0		50.0	50.9		ug/L		102	70 - 130
Zinc	<20		50.0	67.9		ug/L		104	70 - 130

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-116082-D-1 MSD
Matrix: Water
Analysis Batch: 112119

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	52.1		ug/L		104	70 - 130	3	20
Arsenic	<1.0		50.0	49.6		ug/L		99	70 - 130	6	20
Beryllium	<1.0		50.0	47.4		ug/L		95	70 - 130	4	20
Cadmium	<0.50		50.0	50.0		ug/L		100	70 - 130	5	20
Chromium	2.4		50.0	50.5		ug/L		96	70 - 130	7	20
Copper	2.9		50.0	49.1		ug/L		92	70 - 130	6	20
Lead	<0.50		50.0	49.1		ug/L		98	70 - 130	4	20
Nickel	<5.0		50.0	47.4		ug/L		95	70 - 130	6	20
Selenium	<5.0		50.0	52.7		ug/L		103	70 - 130	6	20
Silver	<0.50	F1	50.0	11.7	F1	ug/L		23	70 - 130	0	20
Thallium	<1.0		50.0	48.4		ug/L		97	70 - 130	5	20
Zinc	<20		50.0	64.9		ug/L		98	70 - 130	5	20

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 810-118741/1-A
Matrix: Water
Analysis Batch: 118802

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 118741

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.10		0.10	ug/L		10/14/24 13:26	10/14/24 18:12	1

Lab Sample ID: LCS 810-118741/3-A
Matrix: Water
Analysis Batch: 118802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.935		ug/L		93	85 - 115

Lab Sample ID: LLCS 810-118741/2-A
Matrix: Water
Analysis Batch: 118802

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 118741

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.100	0.113		ug/L		113	50 - 150

Lab Sample ID: 810-122160-K-1-B MS
Matrix: Water
Analysis Batch: 118802

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 118741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.10		1.00	0.951		ug/L		95	70 - 130

Lab Sample ID: 810-122160-K-1-C MSD
Matrix: Water
Analysis Batch: 118802

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 118741

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	<0.10		1.00	0.951		ug/L		95	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-111950/1
Matrix: Water
Analysis Batch: 111950

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			10/04/24 21:42	1
Bicarbonate Alkalinity as CaCO3	<2.0		2.0	mg/L			10/04/24 21:42	1
Carbonate Alkalinity as CaCO3	<2.0		2.0	mg/L			10/04/24 21:42	1

Lab Sample ID: LCS 380-111950/3
Matrix: Water
Analysis Batch: 111950

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	97.8		mg/L		98	90 - 110

Lab Sample ID: LCSD 380-111950/18
Matrix: Water
Analysis Batch: 111950

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
Alkalinity	100	98.0		mg/L		98	90 - 110	0	20

Lab Sample ID: LLCS 380-111950/4
Matrix: Water
Analysis Batch: 111950

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	20.8		mg/L		104	90 - 110

Lab Sample ID: MRL 380-111950/2
Matrix: Water
Analysis Batch: 111950

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	1.86	J	mg/L		93	50 - 150

Lab Sample ID: 380-115888-F-6 MS
Matrix: Water
Analysis Batch: 111950

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
Alkalinity	120		100	213		mg/L		97	80 - 120

Lab Sample ID: 380-115888-F-6 MSD
Matrix: Water
Analysis Batch: 111950

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
Alkalinity	120		100	213		mg/L		96	80 - 120	0	20

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 380-115888-F-6 DU
Matrix: Water
Analysis Batch: 111950

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Alkalinity	120		116		mg/L		0.4	20
Bicarbonate Alkalinity as CaCO3	120		116		mg/L		0.4	20
Carbonate Alkalinity as CaCO3	<2.0		<2.0		mg/L		NC	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-111945/3
Matrix: Water
Analysis Batch: 111945

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Specific Conductance	<2.0		2.0	umhos/cm			10/04/24 21:42	1

Lab Sample ID: LCS 380-111945/5
Matrix: Water
Analysis Batch: 111945

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

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Specific Conductance	1000	997		umhos/cm		100	90 - 110		

Lab Sample ID: LCSD 380-111945/17
Matrix: Water
Analysis Batch: 111945

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Specific Conductance	1000	993		umhos/cm		99	90 - 110	0	10

Lab Sample ID: MRL 380-111945/4
Matrix: Water
Analysis Batch: 111945

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

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
Specific Conductance	2.00	2.00		umhos/cm		100	50 - 150		

Lab Sample ID: 380-115888-F-6 DU
Matrix: Water
Analysis Batch: 111945

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Specific Conductance	340		343		umhos/cm		0	20

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

Lab Sample ID: MB 380-111823/1
Matrix: Water
Analysis Batch: 111823

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Total Dissolved Solids	<10		10	mg/L			10/04/24 12:40	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: HLCS 380-111823/5
Matrix: Water
Analysis Batch: 111823

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	690		mg/L		99	80 - 114

Lab Sample ID: LCS 380-111823/4
Matrix: Water
Analysis Batch: 111823

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	168		mg/L		96	80 - 114

Lab Sample ID: MRL 380-111823/2
Matrix: Water
Analysis Batch: 111823

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	8.00	J	mg/L		80	50 - 150

Lab Sample ID: MRL 380-111823/3
Matrix: Water
Analysis Batch: 111823

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	8.00	J	mg/L		80	50 - 150

Lab Sample ID: 380-115950-B-2 DU
Matrix: Water
Analysis Batch: 111823

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	270		274		mg/L		2	10

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-111954/38
Matrix: Water
Analysis Batch: 111954

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			10/04/24 19:47	1

Lab Sample ID: MB 380-111954/4
Matrix: Water
Analysis Batch: 111954

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			10/04/24 17:24	1

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 380-111954/40
Matrix: Water
Analysis Batch: 111954

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	1.00		mg/L		100	90 - 110

Lab Sample ID: LCSD 380-111954/41
Matrix: Water
Analysis Batch: 111954

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	1.00		mg/L		100	90 - 110	0	10

Lab Sample ID: MRL 380-111954/39
Matrix: Water
Analysis Batch: 111954

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	0.0508		mg/L		102	50 - 150

Lab Sample ID: MRL 380-111954/5
Matrix: Water
Analysis Batch: 111954

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	0.0504		mg/L		101	50 - 150

Lab Sample ID: 380-115765-J-1 MS
Matrix: Water
Analysis Batch: 111954

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	0.39		1.00	1.37		mg/L		98	80 - 120

Lab Sample ID: 380-115765-J-1 MSD
Matrix: Water
Analysis Batch: 111954

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	0.39		1.00	1.38		mg/L		100	80 - 120	1	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-111947/5
Matrix: Water
Analysis Batch: 111947

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.3			SU			10/04/24 21:42	1

QC Sample Results

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: LCS 380-111947/6
Matrix: Water
Analysis Batch: 111947

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 380-111947/18
Matrix: Water
Analysis Batch: 111947

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: 380-115888-F-6 DU
Matrix: Water
Analysis Batch: 111947

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.1		8.2		SU		0.6	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MBL 380-112351/2
Matrix: Water
Analysis Batch: 112351

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			10/08/24 16:36	1

Lab Sample ID: LCS 380-112351/5
Matrix: Water
Analysis Batch: 112351

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	0.269		mg/L		108	90 - 110

Lab Sample ID: LCSD 380-112351/6
Matrix: Water
Analysis Batch: 112351

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	0.271		mg/L		108	90 - 110	1	20

Lab Sample ID: MRL 380-112351/3
Matrix: Water
Analysis Batch: 112351

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	0.0456	J	mg/L		91	50 - 150

QC Sample Results

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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

Lab Sample ID: 380-115992-F-1 MS
Matrix: Water
Analysis Batch: 112351

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	<0.050	F1	mg/L		8	80 - 120

Lab Sample ID: 380-115992-F-1 MSD
Matrix: Water
Analysis Batch: 112351

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	<0.050	F1	mg/L		8	80 - 120	3	20

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

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

GC/MS VOA

Analysis Batch: 112090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	524.2	
380-116075-2	TRAVEL BLANK	Total/NA	Water	524.2	
MB 380-112090/5	Method Blank	Total/NA	Water	524.2	
LCS 380-112090/2	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-112090/3	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-112090/4	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 112293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	524.2	
380-116075-2	TRAVEL BLANK	Total/NA	Water	524.2	
MB 380-112293/15	Method Blank	Total/NA	Water	524.2	
LCS 380-112293/12	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-112293/13	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-112293/11	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-112293/14	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 112625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	524.2	
380-116075-2	TRAVEL BLANK	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 111994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	525.2	
MB 380-111994/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-111994/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-111994/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-111994/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-115709-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	
380-115709-C-1-A MS	Matrix Spike	Total/NA	Water	525.2	

Analysis Batch: 112094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	525.2	111994
LCS 380-111994/23-A	Lab Control Sample	Total/NA	Water	525.2	111994
LCSD 380-111994/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	111994
MRL 380-111994/22-A	Lab Control Sample	Total/NA	Water	525.2	111994
380-115709-B-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	111994
380-115709-C-1-A MS	Matrix Spike	Total/NA	Water	525.2	111994

Analysis Batch: 112221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-111994/21-A	Method Blank	Total/NA	Water	525.2	111994

Prep Batch: 488410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	625.1	
MB 570-488410/1-A	Method Blank	Total/NA	Water	625.1	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

GC/MS Semi VOA (Continued)

Prep Batch: 488410 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-488410/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-488410/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 488516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	625.1 SIM	488410
MB 570-488410/1-A	Method Blank	Total/NA	Water	625.1 SIM	488410
LCS 570-488410/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	488410
LCSD 570-488410/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	488410

Analysis Batch: 492026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	625.1	488410
MB 570-488410/1-A	Method Blank	Total/NA	Water	625.1	488410

GC VOA

Analysis Batch: 489970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	8015B GRO LL	
380-116075-2	TRAVEL BLANK	Total/NA	Water	8015B GRO LL	
MB 570-489970/11	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-489970/1010	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-489970/12	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-489970/1005	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-115753-B-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-115753-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 111778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	504.1	
380-116075-2	TRAVEL BLANK	Total/NA	Water	504.1	
MBL 380-111778/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-111778/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-111778/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-111778/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-115864-E-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-115866-B-1-A DU	Duplicate	Total/NA	Water	504.1	

Prep Batch: 111931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	505	
MB 380-111931/3-A	Method Blank	Total/NA	Water	505	
LCS 380-111931/28-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-111931/30-A	Lab Control Sample	Total/NA	Water	505	
LCSD 380-111931/29-A	Lab Control Sample Dup	Total/NA	Water	505	
MRL 380-111931/1-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-111931/2-A	Lab Control Sample	Total/NA	Water	505	
380-115838-BX-1-B MS	Matrix Spike	Total/NA	Water	505	
380-115838-BY-1-B MS	Matrix Spike	Total/NA	Water	505	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

GC Semi VOA (Continued)

Prep Batch: 111931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-115841-BY-1-B MS	Matrix Spike	Total/NA	Water	505	
380-115841-BZ-1-B MS	Matrix Spike	Total/NA	Water	505	

Analysis Batch: 111937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	505	111931
MB 380-111931/3-A	Method Blank	Total/NA	Water	505	111931
LCS 380-111931/28-A	Lab Control Sample	Total/NA	Water	505	111931
LCS 380-111931/30-A	Lab Control Sample	Total/NA	Water	505	111931
LCSD 380-111931/29-A	Lab Control Sample Dup	Total/NA	Water	505	111931
MRL 380-111931/1-A	Lab Control Sample	Total/NA	Water	505	111931
MRL 380-111931/2-A	Lab Control Sample	Total/NA	Water	505	111931
380-115838-BX-1-B MS	Matrix Spike	Total/NA	Water	505	111931
380-115838-BY-1-B MS	Matrix Spike	Total/NA	Water	505	111931
380-115841-BY-1-B MS	Matrix Spike	Total/NA	Water	505	111931
380-115841-BZ-1-B MS	Matrix Spike	Total/NA	Water	505	111931

Analysis Batch: 111970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	504.1	111778
380-116075-2	TRAVEL BLANK	Total/NA	Water	504.1	111778
MBL 380-111778/4-A	Method Blank	Total/NA	Water	504.1	111778
LCS 380-111778/29-A	Lab Control Sample	Total/NA	Water	504.1	111778
MRL 380-111778/2-A	Lab Control Sample	Total/NA	Water	504.1	111778
MRL 380-111778/3-A	Lab Control Sample	Total/NA	Water	504.1	111778
380-115864-E-1-A MS	Matrix Spike	Total/NA	Water	504.1	111778
380-115866-B-1-A DU	Duplicate	Total/NA	Water	504.1	111778

Prep Batch: 488004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	3510C	
MB 570-488004/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-488004/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-488004/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-488004/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-115753-C-3-A MS	Matrix Spike	Total/NA	Water	3510C	
380-115753-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 488344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	8015B	488004
MB 570-488004/1-A	Method Blank	Total/NA	Water	8015B	488004
LCS 570-488004/2-A	Lab Control Sample	Total/NA	Water	8015B	488004
LCSD 570-488004/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	488004
MRL 570-488004/4-A	Lab Control Sample	Total/NA	Water	8015B	488004
380-115753-C-3-A MS	Matrix Spike	Total/NA	Water	8015B	488004
380-115753-C-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	488004

Analysis Batch: 489418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	8015B	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

GC Semi VOA (Continued)

Analysis Batch: 489418 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-489418/10	Method Blank	Total/NA	Water	8015B	
LCS 570-489418/14	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-489418/15	Lab Control Sample Dup	Total/NA	Water	8015B	
MRL 570-489418/13	Lab Control Sample	Total/NA	Water	8015B	
380-116075-1 MS	Ka'amilo Wells	Total/NA	Water	8015B	
380-116075-1 MSD	Ka'amilo Wells	Total/NA	Water	8015B	

HPLC/IC

Analysis Batch: 111721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	300.0	
MB 380-111721/4	Method Blank	Total/NA	Water	300.0	
LCS 380-111721/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-111721/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-111721/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-111721/6	Lab Control Sample	Total/NA	Water	300.0	
380-115741-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-115741-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 111722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	300.0	
MB 380-111722/4	Method Blank	Total/NA	Water	300.0	
LCS 380-111722/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-111722/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-111722/5	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-111722/6	Lab Control Sample	Total/NA	Water	300.0	
380-115741-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-115741-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 111865

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	300.0	
MB 380-111865/6	Method Blank	Total/NA	Water	300.0	
LCS 380-111865/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-111865/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-111865/5	Lab Control Sample	Total/NA	Water	300.0	
380-115932-C-7 MS	Matrix Spike	Total/NA	Water	300.0	
380-115932-C-7 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Metals

Analysis Batch: 111925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380 116075 1	Ka'amilo Wells	Total/NA	Water	200.8	
MBL 380-111925/234	Method Blank	Total/NA	Water	200.8	
LCS 380-111925/237	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-111925/238	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-111925/236	Lab Control Sample	Total/NA	Water	200.8	
380-116010-A-4 MS	Matrix Spike	Total/NA	Water	200.8	
380-116010-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Metals

Analysis Batch: 112065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	200.7 Rev 4.4	
MB 380-112065/119	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-112065/123	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-112065/124	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-112065/122	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-116024-A-3 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-116024-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

Analysis Batch: 112119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	200.8	
MBL 380-112119/16	Method Blank	Total/NA	Water	200.8	
LCS 380-112119/19	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-112119/20	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-112119/18	Lab Control Sample	Total/NA	Water	200.8	
380-116082-D-1 MS	Matrix Spike	Total/NA	Water	200.8	
380-116082-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

Prep Batch: 118741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	245.1	
MB 810-118741/1-A	Method Blank	Total/NA	Water	245.1	
LCS 810-118741/3-A	Lab Control Sample	Total/NA	Water	245.1	
LLCS 810-118741/2-A	Lab Control Sample	Total/NA	Water	245.1	
810-122160-K-1-B MS	Matrix Spike	Total/NA	Water	245.1	
810-122160-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	

Analysis Batch: 118802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	245.1	118741
MB 810-118741/1-A	Method Blank	Total/NA	Water	245.1	118741
LCS 810-118741/3-A	Lab Control Sample	Total/NA	Water	245.1	118741
LLCS 810-118741/2-A	Lab Control Sample	Total/NA	Water	245.1	118741
810-122160-K-1-B MS	Matrix Spike	Total/NA	Water	245.1	118741
810-122160-K-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	245.1	118741

General Chemistry

Analysis Batch: 111823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 2540C	
MB 380-111823/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-111823/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-111823/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-111823/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-111823/3	Lab Control Sample	Total/NA	Water	SM 2540C	
380-115950-B-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 111945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 2510B	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

General Chemistry (Continued)

Analysis Batch: 111945 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-111945/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-111945/5	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-111945/17	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-111945/4	Lab Control Sample	Total/NA	Water	SM 2510B	
380-115888-F-6 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 111947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 4500 H+ B	
MB 380-111947/5	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-111947/6	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-111947/18	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-115888-F-6 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 111950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 2320B	
MB 380-111950/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-111950/3	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-111950/18	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-111950/4	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-111950/2	Lab Control Sample	Total/NA	Water	SM 2320B	
380-115888-F-6 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-115888-F-6 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-115888-F-6 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 111954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 4500 F C	
MB 380-111954/38	Method Blank	Total/NA	Water	SM 4500 F C	
MB 380-111954/4	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-111954/40	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-111954/41	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-111954/39	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 380-111954/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-115765-J-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-115765-J-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 112351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-116075-1	Ka'amilo Wells	Total/NA	Water	SM 4500 S2 D	
MBL 380-112351/2	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-112351/5	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-112351/6	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-112351/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-115992-F-1 MS	Matrix Spike	Total/NA	Water	SM 4500 S2 D	
380-115992-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 S2 D	

Lab Chronicle

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: Ka'amilo Wells

Lab Sample ID: 380-116075-1

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	112090	P3EE	EA POM	10/07/24 19:03
Total/NA	Analysis	524.2		1	112293	P3EE	EA POM	10/08/24 20:20
Total/NA	Analysis	524.2		1	112625	KP	EA POM	10/08/24 20:20
Total/NA	Prep	525.2			111994	KRD3	EA POM	10/06/24 15:36
Total/NA	Analysis	525.2		1	112094	UPAC	EA POM	10/07/24 19:06
Total/NA	Prep	625.1			488410	PQS1	EET CAL 4	10/06/24 12:09
Total/NA	Analysis	625.1		1	492026	CG	EET CAL 4	10/16/24 14:02
Total/NA	Prep	625.1			488410	PQS1	EET CAL 4	10/06/24 12:09
Total/NA	Analysis	625.1 SIM		1	488516	PQS1	EET CAL 4	10/07/24 11:50
Total/NA	Analysis	8015B GRO LL		1	489970	A9VE	EET CAL 4	10/11/24 02:30
Total/NA	Prep	504.1			111778	LZ8Q	EA POM	10/04/24 12:00 - 10/04/24 13:00 ¹
Total/NA	Analysis	504.1		1	111970	LZ8Q	EA POM	10/04/24 22:09
Total/NA	Prep	505			111931	DR5R	EA POM	10/04/24 15:37 - 10/04/24 16:55 ¹
Total/NA	Analysis	505		1	111937	DR5R	EA POM	10/05/24 00:57
Total/NA	Prep	3510C			488004	H6FE	EET CAL 4	10/04/24 13:52
Total/NA	Analysis	8015B		1	488344	UJ3K	EET CAL 4	10/06/24 11:47
Total/NA	Analysis	8015B		1	489418	ZE2W	EET CAL 4	10/09/24 22:00
Total/NA	Analysis	300.0		1	111865	UNJR	EA POM	10/04/24 15:00
Total/NA	Analysis	300.0		5	111721	BG6L	EA POM	10/04/24 01:15
Total/NA	Analysis	300.0		5	111722	BG6L	EA POM	10/04/24 01:15
Total/NA	Analysis	200.7 Rev 4.4		1	112065	T8BB	EA POM	10/04/24 18:35
Total/NA	Analysis	200.8		1	111925	AAE8	EA POM	10/04/24 21:37
Total/NA	Analysis	200.8		1	112119	AAE8	EA POM	10/07/24 12:19
Total/NA	Prep	245.1			118741	AC	EA SB	10/14/24 13:26
Total/NA	Analysis	245.1		1	118802	AC	EA SB	10/14/24 18:42
Total/NA	Analysis	SM 2320B		1	111950	PK4Q	EA POM	10/04/24 23:30
Total/NA	Analysis	SM 2510B		1	111945	PK4Q	EA POM	10/04/24 23:30
Total/NA	Analysis	SM 2540C		1	111823	UJRF	EA POM	10/04/24 12:40
Total/NA	Analysis	SM 4500 F C		1	111954	PK4Q	EA POM	10/04/24 21:55
Total/NA	Analysis	SM 4500 H+ B		1	111947	PK4Q	EA POM	10/04/24 23:30
Total/NA	Analysis	SM 4500 S2 D		1	112351	MH2L	EA POM	10/08/24 16:36

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	112090	P3EE	EA POM	10/07/24 19:26
Total/NA	Analysis	524.2		1	112293	P3EE	EA POM	10/08/24 20:42
Total/NA	Analysis	524.2		1	112625	KP	EA POM	10/08/24 20:42
Total/NA	Analysis	8015B GRO LL		1	489970	A9VE	EET CAL 4	10/10/24 23:24

Lab Chronicle

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-116075-2

Date Collected: 10/02/24 10:26

Matrix: Water

Date Received: 10/03/24 09:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	504.1			111778	LZ8Q	EA POM	10/04/24 12:00 - 10/04/24 13:00 ¹
Total/NA	Analysis	504.1		1	111970	LZ8Q	EA POM	10/04/24 21:27

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

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



Accreditation/Certification Summary

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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 CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
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
Arizona	State	AZ0830	11-15-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-24
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26

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	12-31-24
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	10-31-24
Kentucky (DW)	State	KY90056	12-31-24
Louisiana (DW)	State	LA014	12-31-24
Maine	State	IN00035	05-01-25

Accreditation/Certification Summary

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

Job ID: 380-116075-1
 SDG: Quarterly - Ka'amilo Wells

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
Maryland	State	209	06-30-25
Massachusetts	State	M-IN035	06-30-25
MI - RadChem Recognition	State	9926	03-22-25
Michigan	State	9926	03-22-25
Minnesota	NELAP	1989807	12-31-24
Mississippi	State	IN00035	06-30-25
Missouri	State	880	09-30-27
Montana (DW)	State	CERT0026	01-01-25
Nebraska	State	NE-OS-05-04	06-30-25
Nevada	State	IN000352024-01	07-31-25
New Hampshire	NELAP	2124	11-05-24
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	12-31-24
Oregon	NELAP	4156	09-16-25
Pennsylvania	NELAP	68-00466	04-30-25
Puerto Rico	State	IN00035	04-01-25
Rhode Island	State	LAO00343	12-30-24
South Carolina	State	95005001	06-30-24 *
South Dakota (DW)	State	IN00035	06-30-25
Tennessee	State	TN02973	06-30-25
Texas	NELAP	T104704187-22-16	12-31-24
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	11-15-24
Virginia	NELAP	460275	03-14-25
Washington	State	C837	01-01-25
West Virginia (DW)	State	9927 C	01-31-25
Wisconsin	State	999766900	08-31-25
Wisconsin (Micro)	State	10121	12-31-24
Wyoming	State	8TMS-L	06-30-25

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

Method Summary

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

Job ID: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

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, Organochlorine Pesticides/PCBs	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: 380-116075-1
SDG: Quarterly - Ka'amilo Wells

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-116075-1	Ka'amilo Wells	Water	10/02/24 10:26	10/03/24 09:23
380-116075-2	TRAVEL BLANK	Water	10/02/24 10:26	10/03/24 09:23

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



Monrovia, CA (Suite 100)
 750 Royal Oaks Drive Suite 100
 Monrovia CA 91016
 Phone (626) 386 1100

Chain of Custody Record

380-116075 COC

Client Information		Lab PM		Carrier Tracking No(s)		COC No:			
Sampler Bailey Phone +1 808-748-5840		Arada Rachelle E-Mail Rachelle.Arada@et.euronisus.com		State of Origin Page 1 of 2		Job # Page 1 of 2			
Company City & County of Honolulu		PWSID		Analysis Requested		Preservation Codes M Hexane N None O AsNsO2 P Na2OAS Q Na2SO3 R Na2SO4 S H2SO4 T TSP Dodecahydrate U Acetone V MCAA W pH 4-5 X DI Water Y Trizma Z EDTA Other:			
Address 630 South Beretania Street, Chemistry Lab City Honolulu State, Zip HI, 96843 Phone 808-748-5091 (tel) Email rfenstermacher@hbws.org		Due Date Requested TAT Requested (days) Compliance Project: Δ No PO # C20525101 exp 05312023 WO # Project # 38001111 SSOW#		504 1_PREC 505_LL_PREC Field Filtered Sample (Yes or No) Perform M/MSD (Yes or No) 504 1_PREC 505_LL_PREC 2220B 2510B SM4500_H+ 2007 200 B 2540C_Coled Total dissolved Solids (TDS) SM4500_S2_D Sulfide Total 524 2_Pres_PREC 524 2_SIM_PREC 525 2_PREC 526plus PLUS TICs 300_OF_28D_B 300_OF_28D_PREC 300_OF_48H_PREC 4500_F_C 245 1 Local Method 8015B_GRO_LL (MOD) GRO 8015B_PRO_LL_CS HNL Ranges C10-C24/C24 C36/C8-C18 8015B_DAI Ethanol 625 1 625 1_SIM Total Number of containers		Special Instructions/Note 7789 7895 5396 39-0.0=3.9 7789 7895 5385 4.6-0.0=4.6			
Sample Identification		Sample Date		Sample Time		Sample Type		Matrix	
Ka'amilo Wells		2-Oct-2024		1026		G		Water	
Travel Blank		2-Oct-2024		1076					
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested I II III IV Other (specify)		Empty Kit Relinquished by		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements	
Relinquished by [Redacted]		Date 08/02/2024 1400		Date/Time 10/2/24 09:23		Date/Time [Redacted]		Method of Shipment: FedEx	
Custody Seals Intact Δ Yes Δ No		Custody Seal No		Company HBWS		Company FEAP		Company [Redacted]	
Relinquished by [Redacted]		Date/Time [Redacted]		Date/Time [Redacted]		Date/Time [Redacted]		Cooler Temperature(s) °C and Other Remarks 75/1A Gel	



Monrovia, CA (Suite 100)
 750 Royal Oaks Drive Suite 100
 Monrovia CA 91016
 Phone (626) 386 1100



Chain of Custody Record

Client Information		Company	City & County of Honolulu	Lab PM	Carrier Tracking No(s)
Client Contact: Dr. Ron Fenstermacher Phone: +1 808-748-5840		Bailey	Honolulu	Avada Rachelle	
Address: 630 South Beretania Street Chemistry Lab		State of Origin HAWAII			
City: Honolulu State/Zip: HI 96843 Phone: 808-748-5091 (tel) Email: rfenstermacher@hbws.org		E-Mail: Rachelle.Arada@et.eurofins.com			
Project Name: RED HILL Site:		PWSID Analysis Requested			
Due Date Requested TAT Requested (days) Compliance Project: <input type="checkbox"/> No <input type="checkbox"/> Yes PO #: C20525101 exp 05312023 WO #: 38001111 Project #: 38001111 SSOW#:		Date Date/Time: 02/20/2024 10:00 Date/Time: 02/24/2024 09:23 Date/Time:			
Sample Identification Ka'amilo Wells Travel Blank		Sample Date: 2-Oct-2024 Sample Time: 1026	Sample Type (C=Comp, G=Grab): Preservation Code: Water	Matrix (W=water, S=solid, O=wastebld, BT=tissue, A-Air) Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 504 I, PREC Local Method <input checked="" type="checkbox"/> R	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested I II III IV Other (specify)		Special Instructions/QC Requirements			
Empty Kit Relinquished by:		Method of Shipment: FedEx			
Relinquished by: Bailey		Received by: ASZ			
Relinquished by:		Received by:			
Relinquished by:		Received by:			
Custody Seals Intact. <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 75/1A Gel			
Custody Seal No		Company: HBWS Company: HBWS Company:			



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Arada, Rachelle	Carrier Tracking No(s): 380-116075-1
Client Contact: Shipping/Receiving		E-Mail: Rachelle.Arada@et.eurofins.com	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		State: Hawaii	Job #: 380-116075-1
Address: 2841 Dow Avenue, Suite 100 City: Tustin State, Zip: CA, 92780 Phone: 714-895-5494(Tel) Email:		Preservation Codes:	
Due Date Requested: 10/16/2024 TAT Requested (days):		Analysis Requested	
PO #:	WO #:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)
Project #: 38001111	SSOW#:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time
Ka'amilo Wells (380-116075-1)		10/2/24	10:25 Hawaiian
TRAVEL BLANK (380-116075-2)		10/2/24	10:25 Hawaiian
Sample Type (C=Comp, G=grab)		Preservation Code:	Matrix (Water, Sample, Overhaul)
G		G	Water
G		G	Water
Special Instructions/Note:		Total Number of Containers	
MRLs are needed. MRLs are needed. Confirm any hits >RL.		0	
MRLs are needed.		2	

380-116075 Chain of Custody

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

Possible Hazard Identification
 Return To Client Disposal By Lab Archive For Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Unconfirmed
 Deliverable Requested: I II III, IV Other (specify) Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____
 Relinquished by: *[Signature]* Date: 10/4/24 Time: 11:10
 Relinquished by: _____
 Relinquished by: _____
 Relinquished by: _____

Method of Shipment: _____

Received by: _____
 Received by: _____
 Received by: _____

Company: _____
 Company: _____
 Company: _____

Cooler Temperature(s) °C and Other Remarks: 1-3 / 2-0 Sec



Eurofins Eaton Analytical Pomona

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)

Client Contact: _____
 Shipping/Receiving _____

Company: Eurofins Eaton Analytical

Address: 110 S Hill Street,
 City: South Bend
 State Zip: IN 46617
 Phone: 574-233-4777(Tel) 574-233-8207(Fax)
 Email: _____

Project Name: RED-HILL
 Site: Honolulu BWS Sites

Project #: 38001111
 SSOW#: _____

WO #: _____

Due Date Requested: 10/16/2024
 TAT Requested (days): _____

PO #: _____

Carrier Tracking No(s): _____

State of Origin: Hawaii

Accreditations Required (See note): State - Hawaii

COC No: 380-158864-1
 Page: 1 of 1

Job #: 380-116075-1
 Preservation Codes: _____

Client Provided Sample Container

Other: _____

Special Instructions/Note: _____

Sample Identification - Client ID (Lab ID)

Sample Date

Sample Time

Sample Type (C=comp, G=grab)

Matrix (W=water, S=solid, O=overstabil, B=brine, A=ash)

Preservation Code

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

245.1/245.1 Prep Mercury by 245.1

Total Number of containers

1

PH<2
 10-7-24 WD

Ka emilo Wells (380-116075-1)

10/2/24

10:26

Hawaiian

G

Water

X

Analysis Requested

Special Instructions/Note: _____

Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____

Method of Shipment: _____

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Custody Seals Intact: _____ Custody Seal No.: _____

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

Possible Hazard Identification

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For _____ Months

Special Instructions/QC Requirements: _____

Method of Shipment: _____

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Cooler Temperature(s) °C and Other Remarks: _____

Ver: 05/06/2024

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-116075-1
SDG Number: Quarterly - Ka'amilo Wells

Login Number: 116075
List Number: 1
Creator: Gerfen, Chris

List Source: Eurofins Eaton Analytical Pomona

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-116075-1
SDG Number: Quarterly - Ka'amilo Wells

Login Number: 116075

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 10/04/24 12:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-116075-1
SDG Number: Quarterly - Ka'amilo Wells

Login Number: 116075
List Number: 3
Creator: DePriest, Kellie

List Source: Eurofins Eaton Analytical South Bend
List Creation: 10/07/24 02:16 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	False	Client provided containers

