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ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Quarterly: Ka'amilo Wells P1/Halawa Wells P1

JOB NUMBER

380-162293-1

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



Authorized for release by
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Definitions/Glossary

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Qualifiers

GC/MS VOA

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.

GC/MS VOA TICs

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC VOA

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.

GC Semi VOA

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.

HPLC/IC

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Definitions/Glossary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Glossary (Continued)

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

DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 380-162293-1

Job ID: 380-162293-1

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Job Narrative 380-162293-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 7/23/2025 9:30 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 0.7°C and 2.2°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_SIM: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-601667 and analytical batch 570-604257 recovered outside control limits for the following analyte(s): 4-Chloroaniline, Aniline, Benzidine and Benzoic acid. 4-Chloroaniline, Aniline, Benzidine and Benzoic acid have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 625.1_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-601667 and analytical batch 570-604257 recovered outside control limits for the following analytes: Benzidine and Benzoic acid. Method 625.1_SIM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 570-601667 and analytical batch 570-604257 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits. Method 625.1_SIM: The matrix spike/matrix spike duplicate (MS/MSD) for preparation batch 570-601667 and analytical batch 570-604257 exceeded control limits for the following analyte(s): Benzidine, Note that this analyte is a known poor performer when analyzed using this method.

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 method reporting limit check (MRL) for analytical batch 570-605797 was inadvertently omitted during the analysis: Ka'amilo Wells P1 (380-162293-1). These analytes were not detected in the associated samples and holding time past for re-analysis; therefore, the original data have been reported. Results by method 8015B_DAI are not acceptable for compliance reporting due MRL check omitted from analysis. The analysis was canceled and a follow up sample was collected on 09/15/25 under job # 380-171948. Analysis by method 8015B_DAI is currently in progress. (XWB4)

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.

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Case Narrative

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

Job ID: 380-162293-1

Job ID: 380-162293-1 (Continued)

Eurofins Eaton Analytical Pomona

HPLC/IC

Method 300_OF_28D_PREC: The continuing calibration blank (CCB) for analytical batch 380-164672 contained Chloride above the method detection limit (MDL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 300_OF_48H_PREC: The following samples were diluted for Nitrite as N to prevent detector saturation due to high conductivity: Ka'amilo Wells P1 (380-162293-1) and HALAWA WELLS P1 (331-023-WL065) (380-162293-2). Elevated reporting limits (RLs) are provided.

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

Metals

Method 200.7: The continuing calibration blank (CCB) for analytical batch 380-164965 contained Potassium above the method detection limit (MDL). All reported samples associated with this CCB contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

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

General Chemistry

Method SM4500_S2_D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for analytical batch 380-165675 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Detection Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.069		0.0099	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.015		0.0099	ug/L	1		525.2	Total/NA
Chlordane (n.o.s.)	0.39		0.099	ug/L	1		505	Total/NA
Bromide	420		10	ug/L	2		300.0	Total/NA
Chloride	120	^2	2.5	mg/L	5		300.0	Total/NA
Nitrate as N	2.1		0.25	mg/L	5		300.0	Total/NA
Sulfate	28		1.3	mg/L	5		300.0	Total/NA
Calcium	20		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	19		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	2.9	^2	0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	63		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	1.4		0.90	ug/L	1		200.8	Total/NA
Copper	1.1		1.0	ug/L	1		200.8	Total/NA
Selenium	4.1		2.0	ug/L	1		200.8	Total/NA
Alkalinity	78		4.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	78		4.0	mg/L	1		SM 2320B	Total/NA
Specific Conductance	600		2.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	340		20	mg/L	1		SM 2540C	Total/NA
Fluoride	0.060		0.050	mg/L	1		SM 4500 F C	Total/NA
pH	7.9	HF		SU	1		SM 4500 H+ B	Total/NA

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)

Lab Sample ID: 380-162293-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Bromide	710		10	ug/L	2		300.0	Total/NA
Chloride	190	^2	5.0	mg/L	10		300.0	Total/NA
Nitrate as N	1.6		0.10	mg/L	2		300.0	Total/NA
Sulfate	45		0.50	mg/L	2		300.0	Total/NA
Fluoride	0.056		0.050	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: TB: Ka'amilo Wells P1

Lab Sample ID: 380-162293-3

No Detections.

This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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			07/29/25 01:13	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			07/29/25 01:13	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			07/29/25 01:13	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,1-Dichloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,1-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2-Dichloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
1,3-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:13	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			07/29/25 01:13	1
2,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:13	1
2-Butanone (MEK)	<5.0		5.0	ug/L			07/29/25 01:13	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			07/29/25 01:13	1
Acetone	<500		500	ug/L			07/29/25 01:13	1
Benzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromobenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromochloromethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromodichloromethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromoethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromoform	<0.50		0.50	ug/L			07/29/25 01:13	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			07/29/25 01:13	1
Carbon disulfide	<0.50		0.50	ug/L			07/29/25 01:13	1
Carbon tetrachloride	<0.50		0.50	ug/L			07/29/25 01:13	1
Chlorobenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Chlorodibromomethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Chloroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			07/29/25 01:13	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			07/29/25 01:13	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:13	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:13	1
Dibromomethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Dichloromethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Diisopropyl ether	<3.0		3.0	ug/L			07/29/25 01:13	1
Ethylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Hexachlorobutadiene	<0.50		0.50	ug/L			07/29/25 01:13	1
Isopropylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
m,p-Xylenes	<0.50		0.50	ug/L			07/29/25 01:13	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			07/29/25 01:13	1

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			07/29/25 01:13	1
Naphthalene	<0.50		0.50	ug/L			07/29/25 01:13	1
n-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
N-Propylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
o-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 01:13	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			07/29/25 01:13	1
o-Xylene	<0.50		0.50	ug/L			07/29/25 01:13	1
p-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 01:13	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			07/29/25 01:13	1
p-Isopropyltoluene	<0.50		0.50	ug/L			07/29/25 01:13	1
sec-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Styrene	<0.50		0.50	ug/L			07/29/25 01:13	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			07/29/25 01:13	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			07/29/25 01:13	1
tert-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:13	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			07/29/25 01:13	1
Toluene	<0.50		0.50	ug/L			07/29/25 01:13	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:13	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:13	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			07/29/25 01:13	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			07/29/25 01:13	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			07/29/25 01:13	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			07/29/25 01:13	1
Xylenes, Total	<0.50		0.50	ug/L			07/29/25 01:13	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		07/29/25 01:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		07/29/25 01:13	1
4-Bromofluorobenzene (Surr)	98		70 - 130		07/29/25 01:13	1
Toluene-d8 (Surr)	101		70 - 130		07/29/25 01:13	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		07/29/25 01:13	1
4-Bromofluorobenzene (Surr)	98		70 - 130		07/29/25 01:13	1
Toluene-d8 (Surr)	101		70 - 130		07/29/25 01:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
2,4'-DDE	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
2,4'-DDT	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
4,4'-DDD	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
4,4'-DDE	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
4,4'-DDT	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Acenaphthene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Acenaphthylene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Acetochlor	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Alachlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
alpha-Chlordane	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Anthracene	<0.020		0.020	ug/L		07/27/25 11:32	07/28/25 08:42	1
Atrazine	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Benz(a)anthracene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/27/25 11:32	07/28/25 08:42	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/27/25 11:32	07/28/25 08:42	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/27/25 11:32	07/28/25 08:42	1
beta-BHC	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		07/27/25 11:32	07/28/25 08:42	1
Aldrin	<0.0099		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Bromacil	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Butachlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Butylbenzylphthalate	<0.49		0.49	ug/L		07/27/25 11:32	07/28/25 08:42	1
Chlorobenzilate	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Chloroneb	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Chlorpyrifos	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Chrysene	<0.020		0.020	ug/L		07/27/25 11:32	07/28/25 08:42	1
delta-BHC	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		07/27/25 11:32	07/28/25 08:42	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Dieldrin	0.069		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Diethylphthalate	<0.49		0.49	ug/L		07/27/25 11:32	07/28/25 08:42	1
Dimethylphthalate	<0.49		0.49	ug/L		07/27/25 11:32	07/28/25 08:42	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		07/27/25 11:32	07/28/25 08:42	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Endosulfan sulfate	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Endrin	<0.0099		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Endrin aldehyde	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
EPTC	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Fluoranthene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Fluorene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
gamma-BHC (Lindane)	<0.0099		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
gamma-Chlordane	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Heptachlor	<0.0099		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Heptachlor epoxide (isomer B)	0.015		0.0099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Hexachlorobenzene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Isophorone	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Malathion	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Methoxychlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Metolachlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Molinate	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Parathion	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Phenanthrene	<0.040		0.040	ug/L		07/27/25 11:32	07/28/25 08:42	1
Propachlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Pyrene	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Simazine	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Terbacil	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Terbutylazine	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Thiobencarb	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/27/25 11:32	07/28/25 08:42	1
trans-Nonachlor	<0.049		0.049	ug/L		07/27/25 11:32	07/28/25 08:42	1
Trifluralin	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
1-Methylnaphthalene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1
2-Methylnaphthalene	<0.099		0.099	ug/L		07/27/25 11:32	07/28/25 08:42	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/27/25 11:32	07/28/25 08:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	07/27/25 11:32	07/28/25 08:42	1
Perylene-d12	84		70 - 130	07/27/25 11:32	07/28/25 08:42	1
Triphenylphosphate	104		70 - 130	07/27/25 11:32	07/28/25 08:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
2,4,5-Trichlorophenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
2,4,6-Trichlorophenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
2,4-Dichlorophenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
2,4-Dinitrophenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
2,6-Dichlorophenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Chloronaphthalene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Chlorophenol	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Methylnaphthalene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Methylphenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Nitroaniline	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
2-Nitrophenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
3/4-Methylphenol	<1.9		1.9	ug/L		07/25/25 05:11	07/30/25 07:09	1
3-Nitroaniline	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
4,6-Dinitro-2-methylphenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Bromophenyl phenyl ether	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Chloro-3-methylphenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Chloroaniline	<4.8	*	4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Chlorophenyl phenyl ether	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Nitroaniline	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
4-Nitrophenol	<4.8		4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
Acenaphthene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Acenaphthylene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Aniline	<0.19	*	0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzidine	<4.8	*- *1	4.8	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzo[a]anthracene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzo[a]pyrene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzoic acid	<9.6	*- *1	9.6	ug/L		07/25/25 05:11	07/30/25 07:09	1
Benzyl alcohol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
Bis(2-chloroethoxy)methane	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Bis(2-chloroethyl)ether	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
bis (2-Chloroisopropyl) ether	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Chrysene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Dibenzofuran	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Fluoranthene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Fluorene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Hexachloroethane	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Naphthalene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Nitrobenzene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
N-Nitrosodi-n-propylamine	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
N-Nitrosodiphenylamine	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Pentachlorophenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
Phenanthrene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1
Phenol	<0.96		0.96	ug/L		07/25/25 05:11	07/30/25 07:09	1
Pyrene	<0.19		0.19	ug/L		07/25/25 05:11	07/30/25 07:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	86		28 - 127	07/25/25 05:11	07/30/25 07:09	1
2-Fluorobiphenyl (Surr)	82		31 - 120	07/25/25 05:11	07/30/25 07:09	1
2-Fluorophenol (Surr)	42		17 - 120	07/25/25 05:11	07/30/25 07:09	1
Nitrobenzene-d5 (Surr)	84		27 - 120	07/25/25 05:11	07/30/25 07:09	1
Phenol-d6 (Surr)	24		10 - 120	07/25/25 05:11	07/30/25 07:09	1
p-Terphenyl-d14 (Surr)	82		45 - 120	07/25/25 05:11	07/30/25 07:09	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
3-Penten-2-one, 4-methyl-	5.2	T J N	ug/L		2.05	141-79-7	07/25/25 05:11	08/04/25 17:52	1
Unknown	5.5	T J	ug/L		2.10	N/A	07/25/25 05:11	08/04/25 17:52	1
Unknown	4.8	T J	ug/L		2.26	N/A	07/25/25 05:11	08/04/25 17:52	1
3-Hexen-2-one, 5-methyl-	5.0	T J N	ug/L		3.00	5166-53-0	07/25/25 05:11	08/04/25 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	95		33 - 139	07/25/25 05:11	08/04/25 17:52	1
2-Fluorobiphenyl (Surr)	95		33 - 126	07/25/25 05:11	08/04/25 17:52	1
2-Fluorophenol (Surr)	58		12 - 120	07/25/25 05:11	08/04/25 17:52	1
Nitrobenzene-d5 (Surr)	110		36 - 120	07/25/25 05:11	08/04/25 17:52	1
Phenol-d6 (Surr)	37		10 - 120	07/25/25 05:11	08/04/25 17:52	1
p-Terphenyl-d14 (Surr)	96		47 - 131	07/25/25 05:11	08/04/25 17:52	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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			08/02/25 17:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		38 - 134				08/02/25 17:01	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		07/24/25 16:41	07/25/25 13:32	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		07/24/25 16:41	07/25/25 13:32	1
1,2-Dibromoethane	<0.010		0.010	ug/L		07/24/25 16:41	07/25/25 13:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	96		60 - 140			07/24/25 16:41	07/25/25 13:32	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		07/24/25 09:57	07/25/25 02:19	1
Chlordane (n.o.s.)	0.39		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1016	<0.070		0.070	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1221	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1232	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1242	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1248	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1254	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
PCB-1260	<0.070		0.070	ug/L		07/24/25 09:57	07/25/25 02:19	1
Polychlorinated biphenyls, Total	<0.099		0.099	ug/L		07/24/25 09:57	07/25/25 02:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		70 - 130			07/24/25 09:57	07/25/25 02:19	1

Method: SW846 8015B - Diesel Range Organics (DRO) (GC) Low Level

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<26		26	ug/L		07/28/25 09:17	08/05/25 05:31	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		07/28/25 09:17	08/05/25 05:31	1
C8-C18	<26		26	ug/L		07/28/25 09:17	08/05/25 05:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	96		60 - 130			07/28/25 09:17	08/05/25 05:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10	mg/L			08/02/25 00:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	109		54 - 120				08/02/25 00:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	420		10	ug/L			07/25/25 21:55	2
Chloride	120	^2	2.5	mg/L			07/24/25 07:27	5
Nitrate as N	2.1		0.25	mg/L			07/24/25 07:27	5
Nitrite as N	<0.25		0.25	mg/L			07/24/25 07:27	5

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	28		1.3	mg/L			07/24/25 07:27	5

Method: EPA 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	20		0.10	mg/L			07/24/25 14:27	1
Magnesium	19		0.10	mg/L			07/24/25 14:27	1
Potassium	2.9	^2	0.10	mg/L			07/24/25 14:27	1
Sodium	63		0.10	mg/L			07/24/25 14:27	1

Method: EPA 200.8 - Mercury (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ug/L		07/24/25 11:13	07/25/25 09:35	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			07/26/25 21:43	1
Arsenic	<1.0		1.0	ug/L			07/26/25 21:43	1
Beryllium	<0.30		0.30	ug/L			07/26/25 21:43	1
Cadmium	<0.50		0.50	ug/L			07/26/25 21:43	1
Chromium	1.4		0.90	ug/L			07/26/25 21:43	1
Copper	1.1		1.0	ug/L			07/26/25 21:43	1
Lead	<0.50		0.50	ug/L			07/26/25 21:43	1
Nickel	<1.0		1.0	ug/L			07/26/25 21:43	1
Selenium	4.1		2.0	ug/L			07/26/25 21:43	1
Silver	<0.50		0.50	ug/L			07/26/25 21:43	1
Thallium	<0.30		0.30	ug/L			07/26/25 21:43	1
Zinc	<5.0		5.0	ug/L			07/26/25 21:43	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	78		4.0	mg/L			07/25/25 21:40	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	78		4.0	mg/L			07/25/25 21:40	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.0		4.0	mg/L			07/25/25 21:40	1
Specific Conductance (SM 2510B)	600		2.0	umhos/cm			07/25/25 21:40	1
Total Dissolved Solids (SM 2540C)	340		20	mg/L			07/24/25 15:30	1
Fluoride (SM 4500 F C)	0.060		0.050	mg/L			07/24/25 23:38	1
pH (SM 4500 H+ B)	7.9	HF		SU			07/25/25 21:40	1
Sulfide (SM 4500 S2 D)	<0.050	F1	0.050	mg/L			07/29/25 16:40	1

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)

Lab Sample ID: 380-162293-2

Date Collected: 07/22/25 09:48

Matrix: Drinking Water

Date Received: 07/23/25 09:30

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	710		10	ug/L			07/25/25 23:14	2
Chloride	190	^2	5.0	mg/L			07/24/25 07:10	10
Nitrate as N	1.6		0.10	mg/L			07/24/25 06:54	2
Nitrite as N	<0.10		0.10	mg/L			07/24/25 06:54	2

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)

Lab Sample ID: 380-162293-2

Date Collected: 07/22/25 09:48

Matrix: Drinking Water

Date Received: 07/23/25 09:30

Method: EPA 300.0 - Anions, Ion Chromatography (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	45		0.50	mg/L			07/24/25 06:54	2

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride (SM 4500 F C)	0.056		0.050	mg/L			07/24/25 23:20	1

Client Sample ID: TB: Ka'amilo Wells P1

Lab Sample ID: 380-162293-3

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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			07/29/25 01:36	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			07/29/25 01:36	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,1-Dichloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,1-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2-Dichloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:36	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,3-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:36	1
2,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 01:36	1
2-Butanone (MEK)	<5.0		5.0	ug/L			07/29/25 01:36	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			07/29/25 01:36	1
Acetone	<500		500	ug/L			07/29/25 01:36	1
Benzene	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromobenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromochloromethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromodichloromethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromoform	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			07/29/25 01:36	1
Carbon disulfide	<0.50		0.50	ug/L			07/29/25 01:36	1
Carbon tetrachloride	<0.50		0.50	ug/L			07/29/25 01:36	1
Chlorobenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
Chlorodibromomethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Chloroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			07/29/25 01:36	1
Dichloromethane	<0.50		0.50	ug/L			07/29/25 01:36	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:36	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:36	1
Dibromomethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Ethylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: TB: Ka'amilo Wells P1

Lab Sample ID: 380-162293-3

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	<0.50		0.50	ug/L			07/29/25 01:36	1
Isopropylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
m,p-Xylenes	<0.50		0.50	ug/L			07/29/25 01:36	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			07/29/25 01:36	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			07/29/25 01:36	1
Naphthalene	<0.50		0.50	ug/L			07/29/25 01:36	1
n-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
N-Propylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			07/29/25 01:36	1
o-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 01:36	1
o-Xylene	<0.50		0.50	ug/L			07/29/25 01:36	1
p-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 01:36	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			07/29/25 01:36	1
p-Isopropyltoluene	<0.50		0.50	ug/L			07/29/25 01:36	1
sec-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
Styrene	<0.50		0.50	ug/L			07/29/25 01:36	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			07/29/25 01:36	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			07/29/25 01:36	1
tert-Butylbenzene	<0.50		0.50	ug/L			07/29/25 01:36	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			07/29/25 01:36	1
Toluene	<0.50		0.50	ug/L			07/29/25 01:36	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			07/29/25 01:36	1
Xylenes, Total	<0.50		0.50	ug/L			07/29/25 01:36	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 01:36	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 01:36	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			07/29/25 01:36	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			07/29/25 01:36	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			07/29/25 01:36	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Bromoethane	<0.50		0.50	ug/L			07/29/25 01:36	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			07/29/25 01:36	1
Diisopropyl ether	<3.0		3.0	ug/L			07/29/25 01:36	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	1.5	T J	ug/L		1.05	N/A		07/29/25 01:36	1
Unknown	0.62	T J	ug/L		3.89	N/A		07/29/25 01:36	1
Unknown	2.2	T J	ug/L		9.02	N/A		07/29/25 01:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		07/29/25 01:36	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		07/29/25 01:36	1
4-Bromofluorobenzene (Surr)	97		70 - 130		07/29/25 01:36	1
4-Bromofluorobenzene (Surr)	97		70 - 130		07/29/25 01:36	1
Toluene-d8 (Surr)	103		70 - 130		07/29/25 01:36	1
Toluene-d8 (Surr)	103		70 - 130		07/29/25 01:36	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			08/03/25 00:02	1

Client Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: TB: Ka'amilo Wells P1

Lab Sample ID: 380-162293-3

Date Collected: 07/22/25 10:02

Matrix: Water

Date Received: 07/23/25 09:30

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>			<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>	
4-Bromofluorobenzene (Surr)	87		38 - 134				08/03/25 00:02	1	
Method: EPA-DW2 504.1 - EDB, DBCP and 1,2,3-TCP (GC)									
<u>Analyte</u>	<u>Result</u>	<u>Qualifier</u>	<u>RL</u>	<u>Unit</u>	<u>D</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>	
1,2,3-Trichloropropane	<0.020		0.020	ug/L		07/28/25 16:47	07/29/25 01:54	1	
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		07/28/25 16:47	07/29/25 01:54	1	
1,2-Dibromoethane	<0.010		0.010	ug/L		07/28/25 16:47	07/29/25 01:54	1	
Surrogate									
1,2-Dibromopropane (Surr)	96		60 - 140			07/28/25 16:47	07/29/25 01:54	1	

Action Limit Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1

Lab Sample ID: 380-162293-1

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 Limit		
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		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
Bromodichloromethane	<0.50		ug/L		80		524.2	Total/NA
Bromoform	<0.50		ug/L		80		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
Chlorodibromomethane	<0.50		ug/L		80		524.2	Total/NA
Chloroform (Trichloromethane)	<0.50		ug/L		80		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	<0.049		ug/L		2		525.2	Total/NA
Atrazine	<0.049		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L		400		525.2	Total/NA
Endrin	<0.0099		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.0099		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.0099		ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.015		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L		50		525.2	Total/NA
Methoxychlor	<0.049		ug/L		40		525.2	Total/NA
Simazine	<0.049		ug/L		4		525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L		0.2		625.1 SIM	Total/NA
Pentachlorophenol	<0.96		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.)	0.39		ug/L		2		505	Total/NA
Polychlorinated biphenyls, Total	<0.099		ug/L		0.5		505	Total/NA

Action Limit Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1 (Continued)

Lab Sample ID: 380-162293-1

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 Limit	EPAMCL Limit	EPAMCL S Limit	Method	Prep Type
Chloride	120	^2	mg/L			250	300.0	Total/NA
Nitrate as N	2.1		mg/L		10		300.0	Total/NA
Nitrite as N	<0.25		mg/L		1		300.0	Total/NA
Sulfate	28		mg/L			250	300.0	Total/NA
Antimony	<1.0		ug/L		6		200.8	Total/NA
Arsenic	<1.0		ug/L		10		200.8	Total/NA
Beryllium	<0.30		ug/L		4		200.8	Total/NA
Cadmium	<0.50		ug/L		5		200.8	Total/NA
Chromium	1.4		ug/L		100		200.8	Total/NA
Copper	1.1		ug/L		1300	1000	200.8	Total/NA
Lead	<0.50		ug/L		10.00		200.8	Total/NA
Selenium	4.1		ug/L		50		200.8	Total/NA
Silver	<0.50		ug/L			100	200.8	Total/NA
Thallium	<0.30		ug/L		2		200.8	Total/NA
Zinc	<5.0		ug/L			5000	200.8	Total/NA
Total Dissolved Solids	340		mg/L			500	SM 2540C	Total/NA
Fluoride	0.060		mg/L		4	2	SM 4500 F C	Total/NA
pH	7.9	HF	SU			6.5	SM 4500 H+ B	Total/NA

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)

Lab Sample ID: 380-162293-2

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	EPAMCL Limit	EPAMCLS Limit	RL	Method	Prep Type
Chloride	190	^2	mg/L		250	5.0	300.0	Total/NA
Nitrate as N	1.6		mg/L	10		0.10	300.0	Total/NA
Nitrite as N	<0.10		mg/L	1		0.10	300.0	Total/NA
Sulfate	45		mg/L		250	0.50	300.0	Total/NA
Fluoride	0.056		mg/L	4	2	0.050	SM 4500 F C	Total/NA

Client Sample ID: TB: Ka'amilo Wells P1

Lab Sample ID: 380-162293-3

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
1,1,1-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		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

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Action Limit Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: TB: Ka'amilo Wells P1 (Continued)

Lab Sample ID: 380-162293-3

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
Bromodichloromethane	<0.50		ug/L		80	0.50	524.2	Total/NA
Bromoform	<0.50		ug/L		80	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
Chlorodibromomethane	<0.50		ug/L		80	0.50	524.2	Total/NA
Chloroform (Trichloromethane)	<0.50		ug/L		80	0.50	524.2	Total/NA
Dichloromethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
cis-1,2-Dichloroethylene	<0.50		ug/L	70.00	70	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
Xylenes, Total	<0.50		ug/L	10000	10000	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
1,2,3-Trichloropropane	<0.020		ug/L	0.6000		0.020	504.1	Total/NA
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

Surrogate Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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)	DCA (70-130)	BFB (70-130)	BFB (70-130)	TOL (70-130)	TOL (70-130)
380-162293-1	Ka'amilo Wells P1	99	99	98	98	101	101
380-162293-3	TB: Ka'amilo Wells P1	98	98	97	97	103	103
LCS 380-165463/3	Lab Control Sample	99	99	103	103	101	101
LCSD 380-165463/4	Lab Control Sample Dup	100	100	99	99	101	101
MB 380-165463/5	Method Blank	102	102	97	97	106	106
MRL 380-165358/13	Lab Control Sample	100	100	101	101	103	103
MRL 380-165358/14	Lab Control Sample	108	108	100	100	105	105

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)
380-162293-1	Ka'amilo Wells P1	97	84	104
380-162293-1 MS	Ka'amilo Wells P1	96	93	104
380-162293-1 MSD	Ka'amilo Wells P1	94	93	105
LCS 380-165237/23-A	Lab Control Sample	95	93	106
MB 380-165237/21-A	Method Blank	92	88	125
MRL 380-165237/22-A	Lab Control Sample	95	86	103

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-162293-1	Ka'amilo Wells P1	95	95	58	110	37	96
MB 570-601667/1-A	Method Blank	83	82	44	94	24	88

Surrogate Legend

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

Surrogate Summary

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-162185-A-1-A MS	Matrix Spike	86	88	49	73	29	96
380-162185-A-1-B MSD	Matrix Spike Duplicate	65	66	36	65	22	68
380-162293-1	Ka'amilo Wells P1	86	82	42	84	24	82
LCS 570-601667/2-A	Lab Control Sample	82	83	45	70	28	91
LCSD 570-601667/3-A	Lab Control Sample Dup	92	92	50	77	31	97
MB 570-601667/1-A	Method Blank	86	80	41	83	25	87

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-162172-B-1 MS	Matrix Spike	99
380-162172-B-1 MSD	Matrix Spike Duplicate	98
380-162293-1	Ka'amilo Wells P1	81
380-162293-3	TB: Ka'amilo Wells P1	87
LCS 570-606111/1008	Lab Control Sample	99
LCSD 570-606111/9	Lab Control Sample Dup	93
MB 570-606111/10	Method Blank	77
MRL 570-606111/11	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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		DBPP1 (60-140)
380-161837-F-1-A MS	Matrix Spike	95
380-162168-T-1-A MS	Matrix Spike	90
380-162292-H-1-A DU	Duplicate	97
380-162293-1	Ka'amilo Wells P1	96
380-162293-3	TB: Ka'amilo Wells P1	96
380-162401-G-1-A DU	Duplicate	89
LCS 380-164927/29-A	Lab Control Sample	93
LCS 380-165374/29-A	Lab Control Sample	94
MBL 380-164927/4-A	Method Blank	98
MBL 380-165374/4-A	Method Blank	95
MRL 380-164927/2-A	Lab Control Sample	90
MRL 380-164927/3-A	Lab Control Sample	99
MRL 380-165374/2-A	Lab Control Sample	92

Surrogate Summary

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBPP1 (60-140)
MRL 380-165374/3-A	Lab Control Sample	91

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)
380-162109-C-1-A MS	Matrix Spike	97
380-162109-D-1-A MS	Matrix Spike	89
380 162292 L 1 A MS	Matrix Spike	97
380-162292-M-1-A MS	Matrix Spike	101
380-162293-1	Ka'amilo Wells P1	99
LCS 380-164806/16-A	Lab Control Sample	105
LCS 380-164806/24-A	Lab Control Sample	99
LCS 380-164806/57-A	Lab Control Sample	92
LCS 380-164806/59-A	Lab Control Sample	99
LCS 380-164806/60-A	Lab Control Sample	102
LCS 380-164806/8-A	Lab Control Sample	91
LCSD 380-164806/58-A	Lab Control Sample Dup	107
MB 380-164806/32-A	Method Blank	103
MRL 380-164806/30-A	Lab Control Sample	101
MRL 380-164806/31-A	Lab Control Sample	99

Surrogate Legend

TCX = Tetrachloro-m-xylene

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-162172-C-1-A MS	Matrix Spike	111
380-162172-C-1-B MSD	Matrix Spike Duplicate	105
380-162293-1	Ka'amilo Wells P1	96
LCS 570-603290/2-A	Lab Control Sample	101
LCSD 570-603290/3-A	Lab Control Sample Dup	103
MB 570-603290/1-A	Method Blank	106
MRL 570-603290/4-A	Lab Control Sample	107

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Surrogate Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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)
380-162293-1	Ka'amilo Wells P1	109
570-240011-J-1 MS	Matrix Spike	101
570-240011-J-1 MSD	Matrix Spike Duplicate	103
LCS 570-605797/5	Lab Control Sample	110
LCSD 570-605797/6	Lab Control Sample Dup	98
MB 570-605797/4	Method Blank	105

Surrogate Legend

HF2PP = Hexafluoro-2-propanol (Surr)

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

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MRL 380-165358/13
Matrix: Water
Analysis Batch: 165358

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	0.667		ug/L		133	50 - 150
Vinyl Chloride (VC)	0.250	0.323		ug/L		129	50 - 150

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

Lab Sample ID: MRL 380-165358/14
Matrix: Water
Analysis Batch: 165358

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	0.504		ug/L		101	50 - 150
1,1,1-Trichloroethane	0.500	0.513		ug/L		103	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.565		ug/L		113	50 - 150
1,1,2-Trichloroethane	0.500	0.532		ug/L		106	50 - 150
1,1-Dichloroethane	0.500	0.530		ug/L		106	50 - 150
1,1-Dichlorethylene	0.500	0.575		ug/L		115	50 - 150
1,1-Dichloropropene	0.500	0.521		ug/L		104	50 - 150
1,2,3-Trichlorobenzene	0.500	0.662		ug/L		132	50 - 150
1,2,3-Trichloropropane	0.500	0.548		ug/L		110	50 - 150
1,2,4-Trichlorobenzene	0.500	0.664		ug/L		133	50 - 150
1,2,4-Trimethylbenzene	0.500	0.522		ug/L		104	50 - 150
1,2-Dichloroethane	0.500	0.595		ug/L		119	50 - 150
1,2-Dichloropropane	0.500	0.503		ug/L		101	50 - 150
1,3,5-Trimethylbenzene	0.500	0.529		ug/L		106	50 - 150
1,3-Dichloropropane	0.500	0.542		ug/L		108	50 - 150
2,2-Dichloropropane	0.500	0.555		ug/L		111	50 - 150
2-Butanone (MEK)	5.00	6.95		ug/L		139	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	6.86		ug/L		137	50 - 150
Acetone	5.00	<4.0		ug/L		77	50 - 150
Benzene	0.500	0.582		ug/L		116	50 - 150
Bromobenzene	0.500	0.519		ug/L		104	50 - 150
Bromochloromethane	0.500	0.523		ug/L		105	50 - 150
Bromodichloromethane	0.500	0.494	J	ug/L		99	50 - 150
Bromoform	0.500	0.467	J	ug/L		93	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.499	J	ug/L		100	50 - 150
Carbon disulfide	0.500	0.545		ug/L		109	50 - 150
Carbon tetrachloride	0.500	0.484	J	ug/L		97	50 - 150
Chlorobenzene	0.500	0.550		ug/L		110	50 - 150
Chlorodibromomethane	0.500	0.461	J	ug/L		92	50 - 150
cis-1,3-Dichloropropene	0.500	0.470	J	ug/L		94	50 - 150
Dichloromethane	0.500	0.570		ug/L		114	50 - 150
Ethylbenzene	0.500	0.585		ug/L		117	50 - 150
Hexachlorobutadiene	0.500	0.675		ug/L		135	50 - 150
Isopropylbenzene	0.500	0.514		ug/L		103	50 - 150
m,p-Xylenes	1.00	1.13		ug/L		113	50 - 150

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MRL 380-165358/14
Matrix: Water
Analysis Batch: 165358

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
m-Dichlorobenzene (1,3-DCB)	0.500	0.538		ug/L		108	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.642		ug/L		128	50 - 150
Naphthalene	0.500	0.603		ug/L		121	50 - 150
n-Butylbenzene	0.500	0.555		ug/L		111	50 - 150
N-Propylbenzene	0.500	0.527		ug/L		105	50 - 150
o-Chlorotoluene	0.500	0.530		ug/L		106	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.514		ug/L		103	50 - 150
o-Xylene	0.500	0.568		ug/L		114	50 - 150
p-Chlorotoluene	0.500	0.514		ug/L		103	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.529		ug/L		106	50 - 150
p-Isopropyltoluene	0.500	0.568		ug/L		114	50 - 150
sec-Butylbenzene	0.500	0.553		ug/L		111	50 - 150
Styrene	0.500	0.515		ug/L		103	50 - 150
Tert-amyl methyl ether	0.500	0.624	J	ug/L		125	50 - 150
1,3-Dichloropropene, Total	1.00	0.917		ug/L		92	50 - 150
Tert-butyl ethyl ether	0.500	0.601	J	ug/L		120	50 - 150
tert-Butylbenzene	0.500	0.548		ug/L		110	50 - 150
Tetrachloroethene (PCE)	0.500	0.536		ug/L		107	50 - 150
Toluene	0.500	0.597		ug/L		119	50 - 150
trans-1,2-Dichloroethylene	0.500	0.583		ug/L		117	50 - 150
trans-1,3-Dichloropropene	0.500	0.447	J	ug/L		89	50 - 150
Trichloroethylene (TCE)	0.500	0.500		ug/L		100	50 - 150
Bromoethane	0.500	0.468	J	ug/L		94	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.459	J	ug/L		92	50 - 150
Trichlorotrifluoroethane	0.500	0.586		ug/L		117	50 - 150
Diisopropyl ether	0.500	0.620	J	ug/L		124	50 - 150
Vinyl Chloride (VC)	0.500	0.476		ug/L		95	50 - 150
Xylenes, Total	1.50	1.70		ug/L		113	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	MRL Limits
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	105		70 - 130

Lab Sample ID: MB 380-165463/5
Matrix: Water
Analysis Batch: 165463

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			07/29/25 00:28	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			07/29/25 00:28	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,1-Dichloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 00:28	1
1,1-Dichloropropene	<0.50		0.50	ug/L			07/29/25 00:28	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 00:28	1

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QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 380-165463/5
Matrix: Water
Analysis Batch: 165463

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
1,2-Dichloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 00:28	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
1,3-Dichloropropane	<0.50		0.50	ug/L			07/29/25 00:28	1
2,2-Dichloropropane	<0.50		0.50	ug/L			07/29/25 00:28	1
2-Butanone (MEK)	<5.0		5.0	ug/L			07/29/25 00:28	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			07/29/25 00:28	1
Acetone	<500		500	ug/L			07/29/25 00:28	1
Benzene	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromobenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromochloromethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromodichloromethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromoform	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			07/29/25 00:28	1
Carbon disulfide	<0.50		0.50	ug/L			07/29/25 00:28	1
Carbon tetrachloride	<0.50		0.50	ug/L			07/29/25 00:28	1
Chlorobenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
Chlorodibromomethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Chloroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			07/29/25 00:28	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 00:28	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 00:28	1
Dibromomethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Dichloromethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Ethylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
Hexachlorobutadiene	<0.50		0.50	ug/L			07/29/25 00:28	1
Isopropylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
m,p-Xylenes	<0.50		0.50	ug/L			07/29/25 00:28	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			07/29/25 00:28	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			07/29/25 00:28	1
Naphthalene	<0.50		0.50	ug/L			07/29/25 00:28	1
n-Butylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
N-Propylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
o-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 00:28	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			07/29/25 00:28	1
o-Xylene	<0.50		0.50	ug/L			07/29/25 00:28	1
p-Chlorotoluene	<0.50		0.50	ug/L			07/29/25 00:28	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			07/29/25 00:28	1
p-Isopropyltoluene	<0.50		0.50	ug/L			07/29/25 00:28	1
sec-Butylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1
Styrene	<0.50		0.50	ug/L			07/29/25 00:28	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			07/29/25 00:28	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			07/29/25 00:28	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			07/29/25 00:28	1
tert-Butylbenzene	<0.50		0.50	ug/L			07/29/25 00:28	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 380-165463/5
Matrix: Water
Analysis Batch: 165463

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			07/29/25 00:28	1
Toluene	<0.50		0.50	ug/L			07/29/25 00:28	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			07/29/25 00:28	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			07/29/25 00:28	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			07/29/25 00:28	1
Bromoethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			07/29/25 00:28	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			07/29/25 00:28	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			07/29/25 00:28	1
Diisopropyl ether	<3.0		3.0	ug/L			07/29/25 00:28	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			07/29/25 00:28	1
Xylenes, Total	<0.50		0.50	ug/L			07/29/25 00:28	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		07/29/25 00:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		07/29/25 00:28	1
4-Bromofluorobenzene (Surr)	97		70 - 130		07/29/25 00:28	1
Toluene-d8 (Surr)	106		70 - 130		07/29/25 00:28	1

Lab Sample ID: LCS 380-165463/3
Matrix: Water
Analysis Batch: 165463

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	4.74		ug/L		95	70 - 130
1,1,1-Trichloroethane	5.00	4.51		ug/L		90	70 - 130
1,1,2,2-Tetrachloroethane	5.00	4.80		ug/L		96	70 - 130
1,1,2-Trichloroethane	5.00	4.61		ug/L		92	70 - 130
1,1-Dichloroethane	5.00	4.55		ug/L		91	70 - 130
1,1-Dichloroethylene	5.00	4.78		ug/L		96	70 - 130
1,1-Dichloropropene	5.00	4.33		ug/L		87	70 - 130
1,2,3-Trichlorobenzene	5.00	5.42		ug/L		108	70 - 130
1,2,3-Trichloropropane	5.00	4.68		ug/L		94	70 - 130
1,2,4-Trichlorobenzene	5.00	5.47		ug/L		109	70 - 130
1,2,4-Trimethylbenzene	5.00	4.95		ug/L		99	70 - 130
1,2-Dichloroethane	5.00	4.82		ug/L		96	70 - 130
1,2-Dichloropropane	5.00	4.42		ug/L		88	70 - 130
1,3,5-Trimethylbenzene	5.00	4.97		ug/L		99	70 - 130
1,3-Dichloropropane	5.00	4.60		ug/L		92	70 - 130
2,2-Dichloropropane	5.00	4.71		ug/L		94	70 - 130
2-Butanone (MEK)	50.0	47.5		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	49.1		ug/L		98	70 - 130
Acetone	50.0	45.7	J	ug/L		91	70 - 130
Benzene	5.00	4.94		ug/L		99	70 - 130
Bromobenzene	5.00	4.80		ug/L		96	70 - 130
Bromochloromethane	5.00	4.59		ug/L		92	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-165463/3
Matrix: Water
Analysis Batch: 165463

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromodichloromethane	5.00	4.39		ug/L		88	70 - 130
Bromoform	5.00	4.86		ug/L		97	70 - 130
Bromomethane (Methyl Bromide)	5.00	4.98		ug/L		100	70 - 130
Carbon disulfide	5.00	4.51		ug/L		90	70 - 130
Carbon tetrachloride	5.00	4.36		ug/L		87	70 - 130
Chlorobenzene	5.00	4.75		ug/L		95	70 - 130
Chlorodibromomethane	5.00	4.40		ug/L		88	70 - 130
cis-1,3-Dichloropropene	5.00	4.63		ug/L		93	70 - 130
Dichloromethane	5.00	4.77		ug/L		95	70 - 130
Ethylbenzene	5.00	5.13		ug/L		103	70 - 130
Hexachlorobutadiene	5.00	5.18		ug/L		104	70 - 130
Isopropylbenzene	5.00	4.94		ug/L		99	70 - 130
m,p-Xylenes	10.0	9.80		ug/L		98	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.93		ug/L		99	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.80		ug/L		96	70 - 130
Naphthalene	5.00	5.08		ug/L		102	70 - 130
n-Butylbenzene	5.00	5.17		ug/L		103	70 - 130
N-Propylbenzene	5.00	4.98		ug/L		100	70 - 130
o-Chlorotoluene	5.00	5.03		ug/L		101	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.90		ug/L		98	70 - 130
o-Xylene	5.00	5.15		ug/L		103	70 - 130
p-Chlorotoluene	5.00	4.90		ug/L		98	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.68		ug/L		94	70 - 130
p-Isopropyltoluene	5.00	5.25		ug/L		105	70 - 130
sec-Butylbenzene	5.00	5.22		ug/L		104	70 - 130
Styrene	5.00	4.82		ug/L		96	70 - 130
Tert-amyl methyl ether	5.00	4.94		ug/L		99	70 - 130
1,3-Dichloropropene, Total	10.0	9.16		ug/L		92	70 - 130
Tert-butyl ethyl ether	5.00	4.91		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.97		ug/L		99	70 - 130
Tetrachloroethene (PCE)	5.00	4.67		ug/L		93	70 - 130
Toluene	5.00	4.86		ug/L		97	70 - 130
trans-1,2-Dichloroethylene	5.00	4.88		ug/L		98	70 - 130
trans-1,3-Dichloropropene	5.00	4.53		ug/L		91	70 - 130
Trichloroethylene (TCE)	5.00	4.68		ug/L		94	70 - 130
Bromoethane	5.00	4.64		ug/L		93	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	4.67		ug/L		93	70 - 130
Trichlorotrifluoroethane	5.00	4.72		ug/L		94	70 - 130
Diisopropyl ether	5.00	4.68		ug/L		94	70 - 130
Vinyl Chloride (VC)	5.00	4.54		ug/L		91	70 - 130
Xylenes, Total	15.0	15.0		ug/L		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	101		70 - 130

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCSD 380-165463/4
Matrix: Water
Analysis Batch: 165463

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	4.49		ug/L		90	70 - 130	5	20
1,1,1-Trichloroethane	5.00	4.30		ug/L		86	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	4.73		ug/L		95	70 - 130	1	20
1,1,2-Trichloroethane	5.00	4.61		ug/L		92	70 - 130	0	20
1,1-Dichloroethane	5.00	4.34		ug/L		87	70 - 130	5	20
1,1-Dichlorethylene	5.00	4.40		ug/L		88	70 - 130	8	20
1,1-Dichloropropene	5.00	4.25		ug/L		85	70 - 130	2	20
1,2,3-Trichlorobenzene	5.00	5.09		ug/L		102	70 - 130	6	20
1,2,3-Trichloropropane	5.00	4.69		ug/L		94	70 - 130	0	20
1,2,4-Trichlorobenzene	5.00	5.09		ug/L		102	70 - 130	7	20
1,2,4-Trimethylbenzene	5.00	4.67		ug/L		93	70 - 130	6	20
1,2-Dichloroethane	5.00	4.91		ug/L		98	70 - 130	2	20
1,2-Dichloropropane	5.00	4.35		ug/L		87	70 - 130	2	20
1,3,5-Trimethylbenzene	5.00	4.68		ug/L		94	70 - 130	6	20
1,3-Dichloropropane	5.00	4.63		ug/L		93	70 - 130	1	20
2,2-Dichloropropane	5.00	4.09		ug/L		82	70 - 130	14	20
2-Butanone (MEK)	50.0	46.1		ug/L		92	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	50.0	49.1		ug/L		98	70 - 130	0	20
Acetone	50.0	46.4	J	ug/L		93	70 - 130	2	20
Benzene	5.00	4.68		ug/L		94	70 - 130	5	20
Bromobenzene	5.00	4.61		ug/L		92	70 - 130	4	20
Bromochloromethane	5.00	4.51		ug/L		90	70 - 130	2	20
Bromodichloromethane	5.00	4.25		ug/L		85	70 - 130	3	20
Bromoform	5.00	4.67		ug/L		93	70 - 130	4	20
Bromomethane (Methyl Bromide)	5.00	4.56		ug/L		91	70 - 130	9	20
Carbon disulfide	5.00	4.18		ug/L		84	70 - 130	7	20
Carbon tetrachloride	5.00	3.96		ug/L		79	70 - 130	10	20
Chlorobenzene	5.00	4.51		ug/L		90	70 - 130	5	20
Chlorodibromomethane	5.00	4.20		ug/L		84	70 - 130	5	20
cis-1,3-Dichloropropene	5.00	4.34		ug/L		87	70 - 130	6	20
Dichloromethane	5.00	4.42		ug/L		88	70 - 130	7	20
Ethylbenzene	5.00	4.84		ug/L		97	70 - 130	6	20
Hexachlorobutadiene	5.00	4.66		ug/L		93	70 - 130	11	20
Isopropylbenzene	5.00	4.54		ug/L		91	70 - 130	8	20
m,p-Xylenes	10.0	9.31		ug/L		93	70 - 130	5	20
m-Dichlorobenzene (1,3-DCB)	5.00	4.62		ug/L		92	70 - 130	6	20
Methyl-tert-butyl Ether (MTBE)	5.00	4.59		ug/L		92	70 - 130	4	20
Naphthalene	5.00	4.77		ug/L		95	70 - 130	6	20
n-Butylbenzene	5.00	4.65		ug/L		93	70 - 130	10	20
N-Propylbenzene	5.00	4.58		ug/L		92	70 - 130	8	20
o-Chlorotoluene	5.00	4.55		ug/L		91	70 - 130	10	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.59		ug/L		92	70 - 130	7	20
o-Xylene	5.00	4.96		ug/L		99	70 - 130	4	20
p-Chlorotoluene	5.00	4.64		ug/L		93	70 - 130	5	20
p-Dichlorobenzene (1,4-DCB)	5.00	4.45		ug/L		89	70 - 130	5	20
p-Isopropyltoluene	5.00	4.76		ug/L		95	70 - 130	10	20
sec-Butylbenzene	5.00	4.81		ug/L		96	70 - 130	8	20
Styrene	5.00	4.57		ug/L		91	70 - 130	5	20

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCSD 380-165463/4
Matrix: Water
Analysis Batch: 165463

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
Tert-amyl methyl ether	5.00	4.57		ug/L		91	70 - 130	8	20
1,3-Dichloropropene, Total	10.0	8.73		ug/L		87	70 - 130	5	20
Tert-butyl ethyl ether	5.00	4.44		ug/L		89	70 - 130	10	20
tert-Butylbenzene	5.00	4.57		ug/L		91	70 - 130	8	20
Tetrachloroethene (PCE)	5.00	4.32		ug/L		86	70 - 130	8	20
Toluene	5.00	4.67		ug/L		93	70 - 130	4	20
trans-1,2-Dichloroethylene	5.00	4.48		ug/L		90	70 - 130	8	20
trans-1,3-Dichloropropene	5.00	4.39		ug/L		88	70 - 130	3	20
Trichloroethylene (TCE)	5.00	4.35		ug/L		87	70 - 130	7	20
Bromoethane	5.00	4.56		ug/L		91	70 - 130	2	20
Trichlorofluoromethane (Freon 11)	5.00	4.31		ug/L		86	70 - 130	8	20
Trichlorotrifluoroethane	5.00	4.18		ug/L		84	70 - 130	12	20
Diisopropyl ether	5.00	4.61		ug/L		92	70 - 130	1	20
Vinyl Chloride (VC)	5.00	4.32		ug/L		86	70 - 130	5	20
Xylenes, Total	15.0	14.3		ug/L		95	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130
Toluene-d8 (Surr)	101		70 - 130

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

Lab Sample ID: MB 380-165237/21-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165237

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
2,4'-DDE	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
2,4'-DDT	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
4,4'-DDD	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
4,4'-DDE	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
4,4'-DDT	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Acenaphthene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Acenaphthylene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Acetochlor	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Alachlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
alpha-BHC	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
alpha-Chlordane	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Anthracene	<0.019		0.019	ug/L		07/27/25 11:32	07/28/25 08:21	1
Atrazine	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Benz(a)anthracene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Benzo[a]pyrene	<0.019		0.019	ug/L		07/27/25 11:32	07/28/25 08:21	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		07/27/25 11:32	07/28/25 08:21	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 380-165237/21-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165237

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<0.019		0.019	ug/L		07/27/25 11:32	07/28/25 08:21	1
beta-BHC	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		07/27/25 11:32	07/28/25 08:21	1
Aldrin	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Bromacil	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Butachlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Butylbenzylphthalate	<0.48		0.48	ug/L		07/27/25 11:32	07/28/25 08:21	1
Chlorobenzilate	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Chloroneb	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Chlorpyrifos	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Chrysene	<0.019		0.019	ug/L		07/27/25 11:32	07/28/25 08:21	1
delta-BHC	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		07/27/25 11:32	07/28/25 08:21	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Dieldrin	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Diethylphthalate	<0.48		0.48	ug/L		07/27/25 11:32	07/28/25 08:21	1
Dimethylphthalate	<0.48		0.48	ug/L		07/27/25 11:32	07/28/25 08:21	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		07/27/25 11:32	07/28/25 08:21	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Endosulfan sulfate	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Endrin	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Endrin aldehyde	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
EPTC	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Fluoranthene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Fluorene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
gamma-BHC (Lindane)	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
gamma-Chlordane	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Heptachlor	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Hexachlorobenzene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Isophorone	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Malathion	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Methoxychlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Metolachlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Molinate	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Naphthalene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Parathion	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Phenanthrene	<0.039		0.039	ug/L		07/27/25 11:32	07/28/25 08:21	1
Propachlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Pyrene	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Simazine	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Terbacil	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 380-165237/21-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165237

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Terbutylazine	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Thiobencarb	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		07/27/25 11:32	07/28/25 08:21	1
trans-Nonachlor	<0.048		0.048	ug/L		07/27/25 11:32	07/28/25 08:21	1
Trifluralin	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
1-Methylnaphthalene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1
2-Methylnaphthalene	<0.097		0.097	ug/L		07/27/25 11:32	07/28/25 08:21	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclohexasiloxane, dodecamethyl-	0.783	T J N	ug/L		3.87	540-97-6	07/27/25 11:32	07/28/25 08:21	1
Phenol, 4-(1,1-dimethylpropyl)-	0.535	T J N	ug/L		4.25	80-46-6	07/27/25 11:32	07/28/25 08:21	1
9-Octadecenamide, (Z)-	3.73	T J N	ug/L		7.87	301-02-0	07/27/25 11:32	07/28/25 08:21	1
13-Docosenamide, (Z)-	1.23	T J N	ug/L		10.39	112-84-5	07/27/25 11:32	07/28/25 08:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	92		70 - 130	07/27/25 11:32	07/28/25 08:21	1
Perylene-d12	88		70 - 130	07/27/25 11:32	07/28/25 08:21	1
Triphenylphosphate	125		70 - 130	07/27/25 11:32	07/28/25 08:21	1

Lab Sample ID: LCS 380-165237/23-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4'-DDD	1.95	2.16		ug/L		111	70 - 130
2,4'-DDE	1.95	2.11		ug/L		108	70 - 130
2,4'-DDT	1.95	2.01		ug/L		103	70 - 130
2,4-Dinitrotoluene	1.95	2.11		ug/L		108	70 - 130
2,6-Dinitrotoluene	1.95	2.02		ug/L		103	70 - 130
4,4'-DDD	1.95	2.17		ug/L		111	70 - 130
4,4'-DDE	1.95	2.10		ug/L		108	70 - 130
4,4'-DDT	1.95	2.13		ug/L		109	70 - 130
Acenaphthene	1.95	1.87		ug/L		96	70 - 130
Acenaphthylene	1.95	1.88		ug/L		96	70 - 130
Acetochlor	1.95	2.09		ug/L		107	70 - 130
Alachlor	1.95	2.07		ug/L		106	70 - 130
alpha-BHC	1.95	1.94		ug/L		99	70 - 130
alpha-Chlordane	1.95	2.17		ug/L		111	70 - 130
Anthracene	1.95	2.02		ug/L		104	70 - 130
Atrazine	1.95	2.17		ug/L		111	70 - 130
Benz(a)anthracene	1.95	2.00		ug/L		102	70 - 130
Benzo[a]pyrene	1.95	1.96		ug/L		100	70 - 130
Benzo[b]fluoranthene	1.95	2.03		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.95	1.92		ug/L		98	70 - 130
Benzo[k]fluoranthene	1.95	1.90		ug/L		97	70 - 130
beta-BHC	1.95	2.09		ug/L		107	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.76		ug/L		90	70 - 130
Aldrin	1.95	1.65		ug/L		84	70 - 130

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QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-165237/23-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromacil	1.95	2.21		ug/L		113	70 - 130
Butachlor	1.95	2.35		ug/L		120	70 - 130
Butylbenzylphthalate	1.95	2.07		ug/L		106	70 - 130
Chlorobenzilate	1.95	2.10		ug/L		107	70 - 130
Chloroneb	1.95	1.97		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	2.06		ug/L		105	70 - 130
Chlorpyrifos	1.95	2.12		ug/L		108	70 - 130
Chrysene	1.95	1.99		ug/L		102	70 - 130
delta-BHC	1.95	1.92		ug/L		98	70 - 130
Di(2-ethylhexyl)adipate	1.95	1.94		ug/L		100	70 - 130
Dibenz(a,h)anthracene	1.95	1.82		ug/L		93	70 - 130
Diclorvos (DDVP)	1.95	2.06		ug/L		106	70 - 130
Dieldrin	1.95	2.11		ug/L		108	70 - 130
Diethylphthalate	1.95	2.05		ug/L		105	70 - 130
Dimethylphthalate	1.95	2.01		ug/L		103	70 - 130
Di-n-butyl phthalate	3.90	4.64		ug/L		119	70 - 130
Di-n-octyl phthalate	1.95	1.71		ug/L		88	70 - 130
Endosulfan I (Alpha)	1.95	1.92		ug/L		99	70 - 130
Endosulfan II (Beta)	1.95	1.95		ug/L		100	70 - 130
Endosulfan sulfate	1.95	2.11		ug/L		108	70 - 130
Endrin	1.95	2.11		ug/L		108	70 - 130
Endrin aldehyde	1.95	1.83		ug/L		94	60 - 130
EPTC	1.95	1.97		ug/L		101	70 - 130
Fluoranthene	1.95	2.15		ug/L		110	70 - 130
Fluorene	1.95	1.97		ug/L		101	70 - 130
gamma-BHC (Lindane)	1.95	2.15		ug/L		110	70 - 130
gamma-Chlordane	1.95	2.20		ug/L		113	70 - 130
Heptachlor	1.95	2.19		ug/L		112	70 - 130
Heptachlor epoxide (isomer B)	1.95	2.06		ug/L		105	70 - 130
Hexachlorobenzene	1.95	1.97		ug/L		101	70 - 130
Hexachlorocyclopentadiene	1.95	1.97		ug/L		101	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	1.89		ug/L		97	70 - 130
Isophorone	1.95	1.93		ug/L		99	70 - 130
Malathion	1.95	2.10		ug/L		108	70 - 130
Methoxychlor	1.95	2.22		ug/L		113	70 - 130
Metolachlor	1.95	2.15		ug/L		110	70 - 130
Molinate	1.95	2.05		ug/L		105	70 - 130
Naphthalene	1.95	1.81		ug/L		93	70 - 130
Parathion	1.95	2.11		ug/L		108	70 - 130
Pendimethalin (Penoxaline)	1.95	2.06		ug/L		105	70 - 130
Phenanthrene	1.95	1.86		ug/L		96	70 - 130
Propachlor	1.95	2.08		ug/L		107	70 - 130
Pyrene	1.95	2.22		ug/L		114	70 - 130
Simazine	1.95	2.29		ug/L		117	70 - 130
Terbacil	1.95	2.21		ug/L		113	70 - 130
Terbutylazine	1.95	2.29		ug/L		117	70 - 130
Thiobencarb	1.95	2.13		ug/L		109	70 - 130
trans-Nonachlor	1.95	2.19		ug/L		112	70 - 130
Trifluralin	1.95	2.07		ug/L		106	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-165237/23-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.95	1.93		ug/L		99	70 - 130
2-Methylnaphthalene	1.95	1.84		ug/L		94	70 - 130
Surrogate							
	LCS %Recovery	LCS Qualifier	Limits				
2-Nitro-m-xylene	95		70 - 130				
Perylene-d12	93		70 - 130				
Triphenylphosphate	106		70 - 130				

Lab Sample ID: MRL 380-165237/22-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0977	0.0893	J	ug/L		91	50 - 150
2,4'-DDE	0.0977	0.101		ug/L		104	50 - 150
2,4'-DDT	0.0977	0.121		ug/L		124	50 - 150
2,4-Dinitrotoluene	0.0977	0.101		ug/L		104	50 - 150
2,6-Dinitrotoluene	0.0977	0.115		ug/L		117	50 - 150
4,4'-DDD	0.0977	0.106		ug/L		109	50 - 150
4,4'-DDE	0.0977	0.0988		ug/L		101	50 - 150
4,4'-DDT	0.0977	0.129		ug/L		132	50 - 150
Acenaphthene	0.0977	0.0926	J	ug/L		95	50 - 150
Acenaphthylene	0.0977	0.0870	J	ug/L		89	50 - 150
Acetochlor	0.0977	0.106		ug/L		108	50 - 150
Alachlor	0.0489	0.0595		ug/L		122	50 - 150
alpha-BHC	0.0977	0.0957	J	ug/L		98	50 - 150
alpha-Chlordane	0.0244	<0.028		ug/L		111	50 - 150
Anthracene	0.0195	0.0216		ug/L		110	50 - 150
Atrazine	0.0489	0.0611		ug/L		125	50 - 150
Benz(a)anthracene	0.0489	0.0527		ug/L		108	50 - 150
Benzo[a]pyrene	0.0195	0.0207		ug/L		106	50 - 150
Benzo[b]fluoranthene	0.0195	0.0253		ug/L		129	50 - 150
Benzo[g,h,i]perylene	0.0489	0.0400	J	ug/L		82	50 - 150
Benzo[k]fluoranthene	0.0195	0.0208		ug/L		106	50 - 150
beta-BHC	0.0977	0.102		ug/L		104	50 - 150
Bis(2-ethylhexyl) phthalate	0.586	0.554	J	ug/L		94	50 - 150
Aldrin	0.00977	<0.0098		ug/L		87	50 - 150
Bromacil	0.0977	0.117		ug/L		119	50 - 150
Butachlor	0.0489	0.0617		ug/L		126	50 - 150
Butylbenzylphthalate	0.489	0.532		ug/L		109	50 - 150
Chlorobenzilate	0.0977	0.101		ug/L		103	50 - 150
Chloroneb	0.0977	0.108		ug/L		111	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0977	0.0992		ug/L		102	50 - 150
Chlorpyrifos	0.0489	0.0482	J	ug/L		99	50 - 150
Chrysene	0.0195	0.0202		ug/L		103	50 - 150
delta-BHC	0.0977	0.0984		ug/L		101	50 - 150
Di(2-ethylhexyl)adipate	0.586	0.618		ug/L		105	50 - 150
Dibenz(a,h)anthracene	0.0489	0.0510		ug/L		104	50 - 150

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MRL 380-165237/22-A
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Diclorvos (DDVP)	0.0489	0.0574		ug/L		118	50 - 150
Dieldrin	0.00977	0.0112		ug/L		115	50 - 150
Diethylphthalate	0.489	0.513		ug/L		105	50 - 150
Dimethylphthalate	0.489	0.501		ug/L		103	50 - 150
Di-n-butyl phthalate	0.489	0.787	J	ug/L		161	49 - 243
Di-n-octyl phthalate	0.0977	0.0905	J	ug/L		93	50 - 150
Endosulfan I (Alpha)	0.0977	0.0792	J	ug/L		81	50 - 150
Endosulfan II (Beta)	0.0977	0.0910	J	ug/L		93	50 - 150
Endosulfan sulfate	0.0977	0.0949	J	ug/L		97	50 - 150
Endrin	0.00977	0.0123		ug/L		126	50 - 150
Endrin aldehyde	0.0977	0.112		ug/L		114	50 - 150
EPTC	0.0977	0.0934	J	ug/L		96	50 - 150
Fluoranthene	0.0977	0.0952	J	ug/L		97	50 - 150
Fluorene	0.0489	<0.049		ug/L		97	50 - 150
gamma-BHC (Lindane)	0.00977	0.0123		ug/L		126	50 - 150
gamma-Chlordane	0.0244	0.0285	J	ug/L		117	50 - 150
Heptachlor	0.00977	0.00938	J	ug/L		96	50 - 150
Heptachlor epoxide (isomer B)	0.00977	0.0109		ug/L		111	50 - 150
Hexachlorobenzene	0.0489	0.0482	J	ug/L		99	50 - 150
Hexachlorocyclopentadiene	0.0489	0.0559		ug/L		114	50 - 150
Indeno[1,2,3-cd]pyrene	0.0489	0.0491		ug/L		101	50 - 150
Isophorone	0.0977	0.115		ug/L		118	50 - 150
Malathion	0.0977	0.112		ug/L		115	50 - 150
Methoxychlor	0.0489	0.0578		ug/L		118	50 - 150
Metolachlor	0.0489	0.0543		ug/L		111	50 - 150
Molinate	0.0977	0.101		ug/L		103	50 - 150
Naphthalene	0.0977	0.0920	J	ug/L		94	50 - 150
Parathion	0.0977	0.0959	J	ug/L		98	50 - 150
Pendimethalin (Penoxaline)	0.0977	0.109		ug/L		112	50 - 150
Phenanthrene	0.0391	0.0407		ug/L		104	50 - 150
Propachlor	0.0489	0.0508		ug/L		104	50 - 150
Pyrene	0.0489	0.0500		ug/L		102	50 - 150
Simazine	0.0489	0.0489	J	ug/L		100	50 - 150
Terbacil	0.0977	0.102		ug/L		104	50 - 150
Terbutylazine	0.0977	0.108		ug/L		110	50 - 150
Thiobencarb	0.0977	0.102		ug/L		105	50 - 150
trans-Nonachlor	0.0244	0.0257	J	ug/L		105	50 - 150
Trifluralin	0.0977	0.102		ug/L		105	50 - 150
1-Methylnaphthalene	0.0977	0.0970	J	ug/L		99	50 - 150
2-Methylnaphthalene	0.0977	0.101		ug/L		103	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	86		70 - 130
Triphenylphosphate	103		70 - 130

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162293-1 MS
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
2,4'-DDD	<0.099		1.96	2.07		ug/L		106	70 - 130
2,4'-DDE	<0.099		1.96	2.04		ug/L		104	70 - 130
2,4'-DDT	<0.099		1.96	1.94		ug/L		99	70 - 130
2,4-Dinitrotoluene	<0.099		1.96	2.00		ug/L		102	70 - 130
2,6-Dinitrotoluene	<0.099		1.96	2.02		ug/L		103	70 - 130
4,4'-DDD	<0.099		1.96	2.13		ug/L		109	70 - 130
4,4'-DDE	<0.099		1.96	1.97		ug/L		101	70 - 130
4,4'-DDT	<0.099		1.96	2.06		ug/L		105	70 - 130
Acenaphthene	<0.099		1.96	1.87		ug/L		96	70 - 130
Acenaphthylene	<0.099		1.96	1.84		ug/L		94	70 - 130
Acetochlor	<0.099		1.96	2.05		ug/L		105	70 - 130
Alachlor	<0.049		1.96	2.09		ug/L		107	70 - 130
alpha-BHC	<0.099		1.96	1.94		ug/L		99	70 - 130
alpha-Chlordane	<0.049		1.96	2.06		ug/L		104	70 - 130
Anthracene	<0.020		1.96	1.97		ug/L		101	70 - 130
Atrazine	<0.049		1.96	2.07		ug/L		106	70 - 130
Benz(a)anthracene	<0.049		1.96	1.94		ug/L		99	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.94		ug/L		99	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	2.04		ug/L		104	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	2.02		ug/L		103	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	1.88		ug/L		96	70 - 130
beta-BHC	<0.099		1.96	2.00		ug/L		102	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.78		ug/L		91	70 - 130
Aldrin	<0.0099		1.96	1.69		ug/L		86	70 - 130
Bromacil	<0.099		1.96	2.22		ug/L		113	70 - 130
Butachlor	<0.049		1.96	2.24		ug/L		114	70 - 130
Butylbenzylphthalate	<0.49		1.96	2.03		ug/L		103	70 - 130
Chlorobenzilate	<0.099		1.96	2.07		ug/L		106	70 - 130
Chloroneb	<0.099		1.96	1.96		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.96	2.01		ug/L		102	70 - 130
Chlorpyrifos	<0.049		1.96	2.15		ug/L		110	70 - 130
Chrysene	<0.020		1.96	1.98		ug/L		101	70 - 130
delta-BHC	<0.099		1.96	1.94		ug/L		99	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	1.88		ug/L		96	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.78		ug/L		91	70 - 130
Diclorvos (DDVP)	<0.049		1.96	2.04		ug/L		104	70 - 130
Dieldrin	0.069		1.96	2.13		ug/L		105	70 - 130
Diethylphthalate	<0.49		1.96	2.01		ug/L		103	70 - 130
Dimethylphthalate	<0.49		1.96	2.01		ug/L		103	70 - 130
Di-n-butyl phthalate	<0.99		3.92	4.63		ug/L		102	70 - 130
Di-n-octyl phthalate	<0.099		1.96	1.76		ug/L		90	70 - 130
Endosulfan I (Alpha)	<0.099		1.96	1.83		ug/L		93	70 - 130
Endosulfan II (Beta)	<0.099		1.96	1.94		ug/L		99	70 - 130
Endosulfan sulfate	<0.099		1.96	2.10		ug/L		107	70 - 130
Endrin	<0.0099		1.96	2.11		ug/L		108	70 - 130
Endrin aldehyde	<0.099		1.96	1.81		ug/L		92	60 - 130
EPTC	<0.099		1.96	2.01		ug/L		103	70 - 130
Fluoranthene	<0.099		1.96	2.04		ug/L		104	70 - 130

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162293-1 MS
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Fluorene	<0.049		1.96	1.93		ug/L		99	70 - 130	
gamma-BHC (Lindane)	<0.0099		1.96	2.12		ug/L		108	70 - 130	
gamma-Chlordane	<0.049		1.96	2.06		ug/L		104	70 - 130	
Heptachlor	<0.0099		1.96	2.24		ug/L		114	70 - 130	
Heptachlor epoxide (isomer B)	0.015		1.96	2.07		ug/L		105	70 - 130	
Hexachlorobenzene	<0.049		1.96	1.93		ug/L		99	70 - 130	
Hexachlorocyclopentadiene	<0.049		1.96	1.91		ug/L		98	70 - 130	
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.94		ug/L		99	70 - 130	
Isophorone	<0.099		1.96	1.96		ug/L		100	70 - 130	
Malathion	<0.099		1.96	2.09		ug/L		107	70 - 130	
Methoxychlor	<0.049		1.96	2.20		ug/L		112	70 - 130	
Metolachlor	<0.049		1.96	2.16		ug/L		111	70 - 130	
Molinate	<0.099		1.96	2.02		ug/L		103	70 - 130	
Naphthalene	<0.099		1.96	1.85		ug/L		94	70 - 130	
Parathion	<0.099		1.96	2.08		ug/L		106	70 - 130	
Pendimethalin (Penoxaline)	<0.099		1.96	1.96		ug/L		100	70 - 130	
Phenanthrene	<0.040		1.96	1.86		ug/L		95	70 - 130	
Propachlor	<0.049		1.96	2.07		ug/L		106	70 - 130	
Pyrene	<0.049		1.96	2.10		ug/L		107	70 - 130	
Simazine	<0.049		1.96	2.23		ug/L		114	70 - 130	
Terbacil	<0.099		1.96	2.04		ug/L		104	70 - 130	
Terbutylazine	<0.099		1.96	2.19		ug/L		112	70 - 130	
Thiobencarb	<0.099		1.96	2.10		ug/L		107	70 - 130	
trans-Nonachlor	<0.049		1.96	2.10		ug/L		107	70 - 130	
Trifluralin	<0.099		1.96	2.00		ug/L		102	70 - 130	
1-Methylnaphthalene	<0.099		1.96	1.93		ug/L		99	70 - 130	
2-Methylnaphthalene	<0.099		1.96	1.84		ug/L		93	70 - 130	
				MS	MS					
Surrogate				%Recovery	Qualifier				Limits	
2-Nitro-m-xylene				96					70 - 130	
Perylene-d12				93					70 - 130	
Triphenylphosphate				104					70 - 130	

Lab Sample ID: 380-162293-1 MSD
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
2,4'-DDD	<0.099		1.97	2.17		ug/L		110	70 - 130	5	20	
2,4'-DDE	<0.099		1.97	2.14		ug/L		108	70 - 130	5	20	
2,4'-DDT	<0.099		1.97	1.99		ug/L		101	70 - 130	3	20	
2,4-Dinitrotoluene	<0.099		1.97	2.07		ug/L		105	70 - 130	4	20	
2,6-Dinitrotoluene	<0.099		1.97	2.01		ug/L		102	70 - 130	0	20	
4,4'-DDD	<0.099		1.97	2.15		ug/L		109	70 - 130	1	20	
4,4'-DDE	<0.099		1.97	2.10		ug/L		106	70 - 130	6	20	
4,4'-DDT	<0.099		1.97	2.11		ug/L		107	70 - 130	3	20	
Acenaphthene	<0.099		1.97	1.89		ug/L		95	70 - 130	1	20	
Acenaphthylene	<0.099		1.97	1.90		ug/L		96	70 - 130	3	20	

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QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162293-1 MSD
Matrix: Water
Analysis Batch: 165311

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA
Prep Batch: 165237

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD Qualifier	Unit	D	%Rec	%Rec	RPD	RPD Limit
	Result			Result					Limits		
Acetochlor	<0.099		1.97	2.09		ug/L		106	70 - 130	2	20
Alachlor	<0.049		1.97	2.09		ug/L		106	70 - 130	0	20
alpha-BHC	<0.099		1.97	1.91		ug/L		97	70 - 130	2	20
alpha-Chlordane	<0.049		1.97	2.17		ug/L		108	70 - 130	5	20
Anthracene	<0.020		1.97	2.05		ug/L		104	70 - 130	4	20
Atrazine	<0.049		1.97	2.15		ug/L		109	70 - 130	4	20
Benz(a)anthracene	<0.049		1.97	2.04		ug/L		103	70 - 130	5	20
Benzo[a]pyrene	<0.020		1.97	2.02		ug/L		102	70 - 130	4	20
Benzo[b]fluoranthene	<0.020		1.97	2.07		ug/L		105	70 - 130	1	20
Benzo[g,h,i]perylene	<0.049		1.97	2.00		ug/L		101	70 - 130	1	20
Benzo[k]fluoranthene	<0.020		1.97	1.88		ug/L		95	70 - 130	0	20
beta-BHC	<0.099		1.97	2.06		ug/L		105	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	<0.59		1.97	1.74		ug/L		88	70 - 130	2	20
Aldrin	<0.0099		1.97	1.67		ug/L		85	70 - 130	1	20
Bromacil	<0.099		1.97	2.19		ug/L		111	70 - 130	1	20
Butachlor	<0.049		1.97	2.36		ug/L		120	70 - 130	5	20
Butylbenzylphthalate	<0.49		1.97	2.11		ug/L		107	70 - 130	4	20
Chlorobenzilate	<0.099		1.97	2.18		ug/L		111	70 - 130	5	20
Chloroneb	<0.099		1.97	1.93		ug/L		98	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	<0.099		1.97	2.09		ug/L		106	70 - 130	4	20
Chlorpyrifos	<0.049		1.97	2.14		ug/L		109	70 - 130	0	20
Chrysene	<0.020		1.97	2.02		ug/L		102	70 - 130	2	20
delta-BHC	<0.099		1.97	1.92		ug/L		97	70 - 130	1	20
Di(2-ethylhexyl)adipate	<0.59		1.97	1.92		ug/L		97	70 - 130	2	20
Dibenz(a,h)anthracene	<0.049		1.97	1.84		ug/L		93	70 - 130	3	20
Diclorvos (DDVP)	<0.049		1.97	2.06		ug/L		104	70 - 130	1	20
Dieldrin	0.069		1.97	2.17		ug/L		106	70 - 130	2	20
Diethylphthalate	<0.49		1.97	2.05		ug/L		104	70 - 130	2	20
Dimethylphthalate	<0.49		1.97	2.01		ug/L		102	70 - 130	0	20
Di-n-butyl phthalate	<0.99		3.95	4.68		ug/L		102	70 - 130	1	20
Di-n-octyl phthalate	<0.099		1.97	1.72		ug/L		87	70 - 130	3	20
Endosulfan I (Alpha)	<0.099		1.97	1.94		ug/L		98	70 - 130	6	20
Endosulfan II (Beta)	<0.099		1.97	1.96		ug/L		99	70 - 130	1	20
Endosulfan sulfate	<0.099		1.97	2.11		ug/L		107	70 - 130	0	20
Endrin	<0.0099		1.97	2.17		ug/L		110	70 - 130	3	20
Endrin aldehyde	<0.099		1.97	1.78		ug/L		90	60 - 130	2	20
EPTC	<0.099		1.97	1.99		ug/L		101	70 - 130	1	20
Fluoranthene	<0.099		1.97	2.18		ug/L		110	70 - 130	7	20
Fluorene	<0.049		1.97	1.96		ug/L		99	70 - 130	1	20
gamma-BHC (Lindane)	<0.0099		1.97	2.17		ug/L		110	70 - 130	3	20
gamma-Chlordane	<0.049		1.97	2.20		ug/L		110	70 - 130	7	20
Heptachlor	<0.0099		1.97	2.23		ug/L		113	70 - 130	0	20
Heptachlor epoxide (isomer B)	0.015		1.97	2.10		ug/L		106	70 - 130	1	20
Hexachlorobenzene	<0.049		1.97	1.98		ug/L		100	70 - 130	3	20
Hexachlorocyclopentadiene	<0.049		1.97	1.98		ug/L		101	70 - 130	4	20
Indeno[1,2,3-cd]pyrene	<0.049		1.97	1.92		ug/L		97	70 - 130	1	20
Isophorone	<0.099		1.97	1.95		ug/L		99	70 - 130	1	20
Malathion	<0.099		1.97	2.12		ug/L		107	70 - 130	1	20
Methoxychlor	<0.049		1.97	2.23		ug/L		113	70 - 130	1	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162293-1 MSD

Matrix: Water

Analysis Batch: 165311

Client Sample ID: Ka'amilo Wells P1

Prep Type: Total/NA

Prep Batch: 165237

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Metolachlor	<0.049		1.97	2.18		ug/L		110	70 - 130	0	20
Molinate	<0.099		1.97	2.04		ug/L		103	70 - 130	1	20
Naphthalene	<0.099		1.97	1.83		ug/L		93	70 - 130	1	20
Parathion	<0.099		1.97	2.09		ug/L		106	70 - 130	0	20
Pendimethalin (Penoxaline)	<0.099		1.97	2.07		ug/L		105	70 - 130	6	20
Phenanthrene	<0.040		1.97	1.89		ug/L		96	70 - 130	2	20
Propachlor	<0.049		1.97	2.12		ug/L		107	70 - 130	2	20
Pyrene	<0.049		1.97	2.22		ug/L		112	70 - 130	6	20
Simazine	<0.049		1.97	2.24		ug/L		114	70 - 130	0	20
Terbacil	<0.099		1.97	2.18		ug/L		110	70 - 130	6	20
Terbutylazine	<0.099		1.97	2.29		ug/L		116	70 - 130	4	20
Thiobencarb	<0.099		1.97	2.13		ug/L		108	70 - 130	2	20
trans-Nonachlor	<0.049		1.97	2.21		ug/L		112	70 - 130	5	20
Trifluralin	<0.099		1.97	2.06		ug/L		105	70 - 130	3	20
1-Methylnaphthalene	<0.099		1.97	1.96		ug/L		99	70 - 130	2	20
2-Methylnaphthalene	<0.099		1.97	1.85		ug/L		93	70 - 130	1	20

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	105		70 - 130

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

Lab Sample ID: MB 570-601667/1-A

Matrix: Water

Analysis Batch: 606410

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 601667

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/L			N/A	07/24/25 09:45	08/04/25 12:24	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	83		33 - 139	07/24/25 09:45	08/04/25 12:24	1
2-Fluorobiphenyl (Surr)	82		33 - 126	07/24/25 09:45	08/04/25 12:24	1
2-Fluorophenol (Surr)	44		12 - 120	07/24/25 09:45	08/04/25 12:24	1
Nitrobenzene-d5 (Surr)	94		36 - 120	07/24/25 09:45	08/04/25 12:24	1
Phenol-d6 (Surr)	24		10 - 120	07/24/25 09:45	08/04/25 12:24	1
p-Terphenyl-d14 (Surr)	88		47 - 131	07/24/25 09:45	08/04/25 12:24	1

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

Lab Sample ID: MB 570-601667/1-A

Matrix: Water

Analysis Batch: 604257

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 601667

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
2,4,5-Trichlorophenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 570-601667/1-A
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 601667

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2,4-Dichlorophenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2,4-Dinitrophenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2,6-Dichlorophenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Chloronaphthalene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Chlorophenol	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Methylnaphthalene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Methylphenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Nitroaniline	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
2-Nitrophenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
3/4-Methylphenol	<2.0		2.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
3-Nitroaniline	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
4,6-Dinitro-2-methylphenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Bromophenyl phenyl ether	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Chloro-3-methylphenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Chloroaniline	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Chlorophenyl phenyl ether	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Nitroaniline	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
4-Nitrophenol	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
Acenaphthene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Acenaphthylene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Aniline	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Anthracene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzidine	<5.0		5.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzo[a]anthracene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzo[a]pyrene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzoic acid	<10		10	ug/L		07/24/25 09:45	07/29/25 22:46	1
Benzyl alcohol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
Bis(2-chloroethoxy)methane	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Bis(2-chloroethyl)ether	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
bis (2-Chloroisopropyl) ether	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Chrysene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Dibenzofuran	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Fluoranthene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Fluorene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Hexachloroethane	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Naphthalene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Nitrobenzene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
N-Nitrosodi-n-propylamine	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
N-Nitrosodiphenylamine	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Pentachlorophenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
Phenanthrene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1
Phenol	<1.0		1.0	ug/L		07/24/25 09:45	07/29/25 22:46	1
Pyrene	<0.20		0.20	ug/L		07/24/25 09:45	07/29/25 22:46	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	86		28 - 127	07/24/25 09:45	07/29/25 22:46	1
2-Fluorobiphenyl (Surr)	80		31 - 120	07/24/25 09:45	07/29/25 22:46	1
2-Fluorophenol (Surr)	41		17 - 120	07/24/25 09:45	07/29/25 22:46	1
Nitrobenzene-d5 (Surr)	83		27 - 120	07/24/25 09:45	07/29/25 22:46	1
Phenol-d6 (Surr)	25		10 - 120	07/24/25 09:45	07/29/25 22:46	1
p-Terphenyl-d14 (Surr)	87		45 - 120	07/24/25 09:45	07/29/25 22:46	1

Lab Sample ID: LCS 570-601667/2-A
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	20.0	16.4		ug/L		82	57 - 120
2,4,6-Trichlorophenol	20.0	16.4		ug/L		82	52 - 129
2,4-Dichlorophenol	20.0	13.7		ug/L		68	53 - 122
2,4-Dinitrophenol	20.0	12.2		ug/L		61	1 - 173
2,6-Dichlorophenol	20.0	13.6		ug/L		68	50 - 120
2-Chloronaphthalene	20.0	16.6		ug/L		83	65 - 120
2-Chlorophenol	20.0	14.3		ug/L		71	36 - 120
2-Methylnaphthalene	20.0	14.3		ug/L		72	43 - 120
2-Methylphenol	20.0	13.2		ug/L		66	46 - 120
2-Nitroaniline	20.0	16.3		ug/L		81	51 - 125
2-Nitrophenol	20.0	13.8		ug/L		69	45 - 167
3/4-Methylphenol	40.0	21.6		ug/L		54	29 - 120
3-Nitroaniline	20.0	15.4		ug/L		77	62 - 129
4,6-Dinitro-2-methylphenol	20.0	15.6		ug/L		78	53 - 130
4-Bromophenyl phenyl ether	20.0	15.9		ug/L		80	65 - 120
4-Chloro-3-methylphenol	20.0	12.4		ug/L		62	41 - 128
4-Chloroaniline	20.0	9.93	*-	ug/L		50	51 - 120
4-Chlorophenyl phenyl ether	20.0	15.8		ug/L		79	38 - 145
4-Nitroaniline	20.0	15.4		ug/L		77	64 - 129
4-Nitrophenol	20.0	5.18		ug/L		26	13 - 129
Acenaphthene	20.0	17.1		ug/L		85	60 - 132
Acenaphthylene	20.0	17.7		ug/L		89	54 - 126
Aniline	20.0	4.56	*-	ug/L		23	52 - 121
Anthracene	20.0	17.2		ug/L		86	43 - 120
Benzidine	20.0	<0.94	*-	ug/L		0.6	20 - 164
Benzo[a]anthracene	20.0	17.8		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	17.2		ug/L		86	32 - 148
Benzo[b]fluoranthene	20.0	17.5		ug/L		88	42 - 140
Benzo[g,h,i]perylene	20.0	17.7		ug/L		88	1 - 195
Benzo[k]fluoranthene	20.0	17.2		ug/L		86	25 - 146
Benzoic acid	20.0	<3.9	*-	ug/L		8	20 - 120
Benzyl alcohol	20.0	11.1		ug/L		56	44 - 122
Bis(2-chloroethoxy)methane	20.0	14.4		ug/L		72	49 - 165
Bis(2-chloroethyl)ether	20.0	16.6		ug/L		83	43 - 126
bis (2-Chloroisopropyl) ether	20.0	16.3		ug/L		81	63 - 139
Chrysene	20.0	17.9		ug/L		90	44 - 140
Dibenz(a,h)anthracene	20.0	17.8		ug/L		89	1 - 200
Dibenzofuran	20.0	16.1		ug/L		81	48 - 120

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 570-601667/2-A
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoranthene	20.0	16.9		ug/L		85	43 - 121
Fluorene	20.0	17.4		ug/L		87	70 - 120
Hexachloroethane	20.0	13.5		ug/L		67	55 - 120
Indeno[1,2,3-cd]pyrene	20.0	16.8		ug/L		84	1 - 151
Naphthalene	20.0	14.2		ug/L		71	36 - 120
Nitrobenzene	20.0	14.0		ug/L		70	54 - 158
N-Nitrosodi-n-propylamine	20.0	15.3		ug/L		77	14 - 198
N-Nitrosodiphenylamine	20.0	20.2		ug/L		101	65 - 133
Pentachlorophenol	20.0	15.6		ug/L		78	38 - 152
Phenanthrene	20.0	17.6		ug/L		88	65 - 120
Phenol	20.0	5.90		ug/L		30	17 - 120
Pyrene	20.0	19.9		ug/L		100	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	82		28 - 127
2-Fluorobiphenyl (Surr)	83		31 - 120
2-Fluorophenol (Surr)	45		17 - 120
Nitrobenzene-d5 (Surr)	70		27 - 120
Phenol-d6 (Surr)	28		10 - 120
p-Terphenyl-d14 (Surr)	91		45 - 120

Lab Sample ID: LCSD 570-601667/3-A
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	16.2		ug/L		81	47 - 120	10	20
2,4,5-Trichlorophenol	20.0	19.0		ug/L		95	57 - 120	15	20
2,4,6-Trichlorophenol	20.0	18.1		ug/L		90	52 - 129	10	35
2,4-Dichlorophenol	20.0	15.1		ug/L		75	53 - 122	10	30
2,4-Dinitrophenol	20.0	11.7		ug/L		58	1 - 173	4	79
2,6-Dichlorophenol	20.0	14.9		ug/L		75	50 - 120	10	20
2-Chloronaphthalene	20.0	18.5		ug/L		93	65 - 120	11	15
2-Chlorophenol	20.0	15.8		ug/L		79	36 - 120	10	37
2-Methylnaphthalene	20.0	15.7		ug/L		79	43 - 120	9	20
2-Methylphenol	20.0	14.9		ug/L		74	46 - 120	12	20
2-Nitroaniline	20.0	18.6		ug/L		93	51 - 125	13	20
2-Nitrophenol	20.0	15.2		ug/L		76	45 - 167	10	33
3/4-Methylphenol	40.0	24.0		ug/L		60	29 - 120	10	20
3-Nitroaniline	20.0	17.7		ug/L		89	62 - 129	14	20
4,6-Dinitro-2-methylphenol	20.0	17.3		ug/L		87	53 - 130	10	122
4-Bromophenyl phenyl ether	20.0	17.7		ug/L		88	65 - 120	10	26
4-Chloro-3-methylphenol	20.0	13.6		ug/L		68	41 - 128	9	44
4-Chloroaniline	20.0	11.5		ug/L		57	51 - 120	14	20
4-Chlorophenyl phenyl ether	20.0	17.9		ug/L		89	38 - 145	12	36
4-Nitroaniline	20.0	17.8		ug/L		89	64 - 129	14	20
4-Nitrophenol	20.0	5.81		ug/L		29	13 - 129	11	79
Acenaphthene	20.0	19.2		ug/L		96	60 - 132	12	29

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCSD 570-601667/3-A
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthylene	20.0	19.8		ug/L		99	54 - 126	11	45
Aniline	20.0	5.41	*	ug/L		27	52 - 121	17	21
Anthracene	20.0	19.2		ug/L		96	43 - 120	11	40
Benzidine	20.0	<0.94	*- *1	ug/L		0.9	20 - 164	39	30
Benzo[a]anthracene	20.0	19.8		ug/L		99	42 - 133	11	32
Benzo[a]pyrene	20.0	19.3		ug/L		97	32 - 148	12	43
Benzo[b]fluoranthene	20.0	19.4		ug/L		97	42 - 140	10	43
Benzo[g,h,i]perylene	20.0	20.0		ug/L		100	1 - 195	12	61
Benzo[k]fluoranthene	20.0	19.3		ug/L		97	25 - 146	12	38
Benzoic acid	20.0	<3.9	*- *1	ug/L		6	20 - 120	35	30
Benzyl alcohol	20.0	12.4		ug/L		62	44 - 122	11	20
Bis(2-chloroethoxy)methane	20.0	16.2		ug/L		81	49 - 165	12	32
Bis(2-chloroethyl)ether	20.0	19.0		ug/L		95	43 - 126	13	65
bis (2-Chloroisopropyl) ether	20.0	18.4		ug/L		92	63 - 139	12	46
Chrysene	20.0	19.8		ug/L		99	44 - 140	10	53
Dibenz(a,h)anthracene	20.0	19.7		ug/L		99	1 - 200	10	75
Dibenzofuran	20.0	17.7		ug/L		89	48 - 120	10	20
Fluoranthene	20.0	19.0		ug/L		95	43 - 121	12	40
Fluorene	20.0	19.5		ug/L		98	70 - 120	12	23
Hexachloroethane	20.0	15.6		ug/L		78	55 - 120	15	32
Indeno[1,2,3-cd]pyrene	20.0	18.8		ug/L		94	1 - 151	11	60
Naphthalene	20.0	15.9		ug/L		80	36 - 120	12	39
Nitrobenzene	20.0	15.4		ug/L		77	54 - 158	10	37
N-Nitrosodi-n-propylamine	20.0	17.8		ug/L		89	14 - 198	15	52
N-Nitrosodiphenylamine	20.0	22.5		ug/L		112	65 - 133	11	20
Pentachlorophenol	20.0	17.7		ug/L		88	38 - 152	12	52
Phenanthrene	20.0	19.3		ug/L		96	65 - 120	9	24
Phenol	20.0	6.64		ug/L		33	17 - 120	12	39
Pyrene	20.0	21.6		ug/L		108	70 - 120	8	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	92		28 - 127
2-Fluorobiphenyl (Surr)	92		31 - 120
2-Fluorophenol (Surr)	50		17 - 120
Nitrobenzene-d5 (Surr)	77		27 - 120
Phenol-d6 (Surr)	31		10 - 120
p-Terphenyl-d14 (Surr)	97		45 - 120

Lab Sample ID: 380-162185-A-1-A MS
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.8	15.9		ug/L		80	36 - 120
2,4,5-Trichlorophenol	<4.9	F2	19.8	18.1		ug/L		91	21 - 145
2,4,6-Trichlorophenol	<0.97		19.8	17.6		ug/L		89	37 - 144
2,4-Dichlorophenol	<0.97		19.8	15.0		ug/L		75	39 - 135
2,4-Dinitrophenol	<4.9		19.8	15.1		ug/L		76	1 - 191

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QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162185-A-1-A MS
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
2,6-Dichlorophenol	<4.9		19.8	14.9		ug/L		75	24 - 134
2-Chloronaphthalene	<0.19	F2	19.8	18.0		ug/L		91	60 - 120
2-Chlorophenol	<0.19		19.8	16.8		ug/L		85	23 - 143
2-Methylnaphthalene	<0.19		19.8	15.6		ug/L		79	32 - 124
2-Methylphenol	<0.97	F2	19.8	15.1		ug/L		76	10 - 135
2-Nitroaniline	<4.9	F2	19.8	18.1		ug/L		91	10 - 147
2-Nitrophenol	<4.9		19.8	15.0		ug/L		76	29 - 182
3/4-Methylphenol	<1.9	F2	39.6	24.3		ug/L		61	10 - 118
3-Nitroaniline	<4.9	F2	19.8	15.5		ug/L		78	10 - 153
4,6-Dinitro-2-methylphenol	<4.9		19.8	16.5		ug/L		83	1 - 181
4-Bromophenyl phenyl ether	<0.19		19.8	16.7		ug/L		84	53 - 127
4-Chloro-3-methylphenol	<0.97		19.8	14.6		ug/L		74	22 - 147
4-Chloroaniline	<4.9	*- F2	19.8	8.91		ug/L		45	10 - 131
4-Chlorophenyl phenyl ether	<0.19		19.8	17.1		ug/L		86	25 - 158
4-Nitroaniline	<4.9	F2	19.8	17.1		ug/L		86	10 - 180
4-Nitrophenol	<4.9		19.8	7.02		ug/L		35	1 - 132
Acenaphthene	<0.19		19.8	18.2		ug/L		92	47 - 145
Acenaphthylene	<0.19		19.8	19.0		ug/L		96	33 - 145
Aniline	<0.19	*-	19.8	2.67		ug/L		13	10 - 113
Anthracene	<0.19		19.8	17.9		ug/L		91	27 - 133
Benzidine	<4.9	*- *1 F1	19.8	<5.0	F1	ug/L		0	10 - 57
Benzo[a]anthracene	<0.19		19.8	18.9		ug/L		95	33 - 143
Benzo[a]pyrene	<0.19		19.8	17.8		ug/L		90	17 - 163
Benzo[b]fluoranthene	<0.19		19.8	17.8		ug/L		90	24 - 159
Benzo[g,h,i]perylene	<0.19		19.8	18.1		ug/L		91	1 - 219
Benzo[k]fluoranthene	<0.19		19.8	17.6		ug/L		89	11 - 162
Benzoic acid	<9.7	*- *1	19.8	<9.9		ug/L		29	10 - 97
Benzyl alcohol	<0.97	F2	19.8	11.2		ug/L		56	10 - 122
Bis(2-chloroethoxy)methane	<0.19		19.8	14.9		ug/L		75	33 - 184
Bis(2-chloroethyl)ether	<0.19		19.8	18.0		ug/L		91	12 - 158
bis (2-Chloroisopropyl) ether	<0.19		19.8	17.6		ug/L		89	36 - 166
Chrysene	<0.19		19.8	18.5		ug/L		93	17 - 168
Dibenz(a,h)anthracene	<0.19		19.8	18.2		ug/L		92	1 - 227
Dibenzofuran	<0.19	F2	19.8	17.4		ug/L		88	42 - 111
Fluoranthene	<0.19		19.8	17.9		ug/L		90	26 - 137
Fluorene	<0.19		19.8	18.6		ug/L		94	59 - 121
Hexachloroethane	<0.19		19.8	15.4		ug/L		78	40 - 120
Indeno[1,2,3-cd]pyrene	<0.19		19.8	17.2		ug/L		87	1 - 171
Naphthalene	<0.19		19.8	15.1		ug/L		76	21 - 133
Nitrobenzene	<0.19		19.8	14.3		ug/L		72	35 - 180
N-Nitrosodi-n-propylamine	<0.19		19.8	16.5		ug/L		83	1 - 230
N-Nitrosodiphenylamine	<0.19	F2	19.8	20.8		ug/L		105	10 - 179
Pentachlorophenol	<0.97		19.8	8.05		ug/L		41	14 - 176
Phenanthrene	<0.19		19.8	18.4		ug/L		93	54 - 120
Phenol	<0.97		19.8	6.34		ug/L		32	5 - 120
Pyrene	<0.19		19.8	21.2		ug/L		107	52 - 120

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162185-A-1-A MS
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 601667

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	86		28 - 127
2-Fluorobiphenyl (Surr)	88		31 - 120
2-Fluorophenol (Surr)	49		17 - 120
Nitrobenzene-d5 (Surr)	73		27 - 120
Phenol-d6 (Surr)	29		10 - 120
p-Terphenyl-d14 (Surr)	96		45 - 120

Lab Sample ID: 380-162185-A-1-B MSD
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
1-Methylnaphthalene	<0.19		19.2	13.4		ug/L		70	36 - 120	17	30	
2,4,5-Trichlorophenol	<4.9	F2	19.2	12.2	F2	ug/L		64	21 - 145	38	30	
2,4,6-Trichlorophenol	<0.97		19.2	13.1		ug/L		68	37 - 144	30	58	
2,4-Dichlorophenol	<0.97		19.2	12.6		ug/L		66	39 - 135	17	50	
2,4-Dinitrophenol	<4.9		19.2	10.4		ug/L		54	1 - 191	37	132	
2,6-Dichlorophenol	<4.9		19.2	12.6		ug/L		66	24 - 134	17	30	
2-Chloronaphthalene	<0.19	F2	19.2	13.4	F2	ug/L		70	60 - 120	29	24	
2-Chlorophenol	<0.19		19.2	11.9		ug/L		62	23 - 143	35	61	
2-Methylnaphthalene	<0.19		19.2	13.2		ug/L		69	32 - 124	17	30	
2-Methylphenol	<0.97	F2	19.2	11.0	F2	ug/L		57	10 - 135	32	30	
2-Nitroaniline	<4.9	F2	19.2	12.6	F2	ug/L		65	10 - 147	36	30	
2-Nitrophenol	<4.9		19.2	12.7		ug/L		66	29 - 182	17	55	
3/4-Methylphenol	<1.9	F2	38.5	17.0	F2	ug/L		44	10 - 118	35	30	
3-Nitroaniline	<4.9	F2	19.2	8.60	F2	ug/L		45	10 - 153	57	30	
4,6-Dinitro-2-methylphenol	<4.9		19.2	12.1		ug/L		63	1 - 181	31	203	
4-Bromophenyl phenyl ether	<0.19		19.2	12.6		ug/L		65	53 - 127	28	43	
4-Chloro-3-methylphenol	<0.97		19.2	12.0		ug/L		62	22 - 147	20	73	
4-Chloroaniline	<4.9	*- F2	19.2	6.00	F2	ug/L		31	10 - 131	39	30	
4-Chlorophenyl phenyl ether	<0.19		19.2	12.2		ug/L		63	25 - 158	33	61	
4-Nitroaniline	<4.9	F2	19.2	10.0	F2	ug/L		52	10 - 180	52	30	
4-Nitrophenol	<4.9		19.2	4.84		ug/L		25	1 - 132	37	131	
Acenaphthene	<0.19		19.2	13.5		ug/L		70	47 - 145	30	48	
Acenaphthylene	<0.19		19.2	13.8		ug/L		71	33 - 145	32	74	
Aniline	<0.19	*-	19.2	2.23		ug/L		12	10 - 113	18	30	
Anthracene	<0.19		19.2	13.1		ug/L		68	27 - 133	32	66	
Benzidine	<4.9	*- *1 F1	19.2	<4.8	F1	ug/L		0	10 - 57	NC	30	
Benzo[a]anthracene	<0.19		19.2	13.7		ug/L		71	33 - 143	32	53	
Benzo[a]pyrene	<0.19		19.2	12.8		ug/L		67	17 - 163	32	72	
Benzo[b]fluoranthene	<0.19		19.2	13.1		ug/L		68	24 - 159	31	71	
Benzo[g,h,i]perylene	<0.19		19.2	13.1		ug/L		68	1 - 219	32	97	
Benzo[k]fluoranthene	<0.19		19.2	13.0		ug/L		68	11 - 162	30	63	
Benzoic acid	<9.7	*- *1	19.2	<9.6		ug/L		26	10 - 97	16	30	
Benzyl alcohol	<0.97	F2	19.2	7.04	F2	ug/L		37	10 - 122	45	30	
Bis(2-chloroethoxy)methane	<0.19		19.2	12.3		ug/L		64	33 - 184	19	54	
Bis(2-chloroethyl)ether	<0.19		19.2	12.9		ug/L		67	12 - 158	33	108	
bis (2-Chloroisopropyl) ether	<0.19		19.2	12.3		ug/L		64	36 - 166	35	76	

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162185-A-1-B MSD
Matrix: Water
Analysis Batch: 604257

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 601667

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier						
Chrysene	<0.19		19.2	13.6		ug/L		71	17 - 168	30	87
Dibenz(a,h)anthracene	<0.19		19.2	13.5		ug/L		70	1 - 227	29	126
Dibenzofuran	<0.19	F2	19.2	12.5	F2	ug/L		65	42 - 111	33	30
Fluoranthene	<0.19		19.2	13.2		ug/L		69	26 - 137	30	66
Fluorene	<0.19		19.2	13.3		ug/L		69	59 - 121	33	38
Hexachloroethane	<0.19		19.2	10.9		ug/L		57	40 - 120	34	52
Indeno[1,2,3-cd]pyrene	<0.19		19.2	12.7		ug/L		66	1 - 171	31	99
Naphthalene	<0.19		19.2	13.4		ug/L		70	21 - 133	12	65
Nitrobenzene	<0.19		19.2	12.3		ug/L		64	35 - 180	15	62
N-Nitrosodi-n-propylamine	<0.19		19.2	11.7		ug/L		61	1 - 230	35	87
N-Nitrosodiphenylamine	<0.19	F2	19.2	15.0	F2	ug/L		78	10 - 179	33	30
Pentachlorophenol	<0.97		19.2	6.13		ug/L		32	14 - 176	27	86
Phenanthrene	<0.19		19.2	13.7		ug/L		71	54 - 120	30	39
Phenol	<0.97		19.2	4.52		ug/L		24	5 - 120	33	64
Pyrene	<0.19		19.2	14.7		ug/L		76	52 - 120	36	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	65		28 - 127
2-Fluorobiphenyl (Surr)	66		31 - 120
2-Fluorophenol (Surr)	36		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	22		10 - 120
p-Terphenyl-d14 (Surr)	68		45 - 120

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

Lab Sample ID: MB 570-606111/10
Matrix: Water
Analysis Batch: 606111

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			08/02/25 14:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		38 - 134		08/02/25 14:28	1

Lab Sample ID: LCS 570-606111/1008
Matrix: Water
Analysis Batch: 606111

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	387		ug/L		97	78 - 120

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

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCSD 570-606111/9
Matrix: Water
Analysis Batch: 606111

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	392		ug/L		98	78 - 120	1	10
Surrogate		LCS D %Recovery	LCS D Qualifier						Limits
4-Bromofluorobenzene (Surr)		93							38 - 134

Lab Sample ID: MRL 570-606111/11
Matrix: Water
Analysis Batch: 606111

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	8.73	J	ug/L		87	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		79					38 - 134

Lab Sample ID: 380-162172-B-1 MS
Matrix: Water
Analysis Batch: 606111

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	398		ug/L		100	68 - 122
Surrogate				MS %Recovery					Limits
4-Bromofluorobenzene (Surr)				99					38 - 134

Lab Sample ID: 380-162172-B-1 MSD
Matrix: Water
Analysis Batch: 606111

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	409		ug/L		102	68 - 122	3	18
Surrogate				MSD %Recovery					Limits		
4-Bromofluorobenzene (Surr)				98					38 - 134		

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

Lab Sample ID: MBL 380-164927/4-A
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 164927

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		07/24/25 16:41	07/25/25 05:39	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		07/24/25 16:41	07/25/25 05:39	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		07/24/25 16:41	07/25/25 05:39	1

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

<u>Surrogate</u>	<u>MBL</u> <u>%Recovery</u>	<u>MBL</u> <u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
1,2-Dibromopropane (Surr)	98		60 - 140	07/24/25 16:41	07/25/25 05:39	1

Lab Sample ID: LCS 380-164927/29-A
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164927

<u>Analyte</u>	<u>Spike</u> <u>Added</u>	<u>LCS</u> <u>Result</u>	<u>LCS</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>
1,2,3-Trichloropropane	0.200	0.217		ug/L		109	70 - 130
1,2-Dibromo-3-Chloropropane	0.200	0.197		ug/L		98	70 - 130
1,2-Dibromoethane	0.200	0.210		ug/L		105	70 - 130

<u>Surrogate</u>	<u>LCS</u> <u>%Recovery</u>	<u>LCS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dibromopropane (Surr)	93		60 - 140

Lab Sample ID: MRL 380-164927/2-A
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164927

<u>Analyte</u>	<u>Spike</u> <u>Added</u>	<u>MRL</u> <u>Result</u>	<u>MRL</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>
1,2,3-Trichloropropane	0.0200	0.0156	J	ug/L		78	60 - 140

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

Lab Sample ID: MRL 380-164927/3-A
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164927

<u>Analyte</u>	<u>Spike</u> <u>Added</u>	<u>MRL</u> <u>Result</u>	<u>MRL</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>
1,2,3-Trichloropropane	0.0500	0.0491		ug/L		98	60 - 140
1,2-Dibromo-3-Chloropropane	0.0100	0.00921	J	ug/L		92	60 - 140
1,2-Dibromoethane	0.0100	0.00862	J	ug/L		86	60 - 140

<u>Surrogate</u>	<u>MRL</u> <u>%Recovery</u>	<u>MRL</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dibromopropane (Surr)	99		60 - 140

Lab Sample ID: 380-161837-F-1-A MS
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 164927

<u>Analyte</u>	<u>Sample</u> <u>Result</u>	<u>Sample</u> <u>Qualifier</u>	<u>Spike</u> <u>Added</u>	<u>MS</u> <u>Result</u>	<u>MS</u> <u>Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>%Rec</u> <u>Limits</u>
1,2,3-Trichloropropane	<0.020		1.25	1.21		ug/L		97	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.250	0.225		ug/L		90	65 - 135
1,2-Dibromoethane	<0.010		0.250	0.210		ug/L		84	65 - 135

<u>Surrogate</u>	<u>MS</u> <u>%Recovery</u>	<u>MS</u> <u>Qualifier</u>	<u>Limits</u>
1,2-Dibromopropane (Surr)	95		60 - 140

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162292-H-1-A DU
Matrix: Water
Analysis Batch: 165162

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 164927

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1,2,3-Trichloropropane	<0.020		<0.020		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.010		<0.010		ug/L		NC	20
1,2-Dibromoethane	<0.010		<0.010		ug/L		8	20
		DU	DU					
Surrogate	%Recovery	Qualifier	Limits					
1,2-Dibromopropane (Surr)	97		60 - 140					

Lab Sample ID: MBL 380-165374/4-A
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 165374

Analyte	MBL	MBL	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		07/28/25 16:47	07/28/25 19:26	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		07/28/25 16:47	07/28/25 19:26	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		07/28/25 16:47	07/28/25 19:26	1
		MBL	MBL					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1,2-Dibromopropane (Surr)	95		60 - 140	07/28/25 16:47	07/28/25 19:26	1		

Lab Sample ID: LCS 380-165374/29-A
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.200	0.189		ug/L		94	70 - 130
1,2-Dibromoethane	0.200	0.201		ug/L		100	70 - 130
		LCS	LCS				
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dibromopropane (Surr)	94		60 - 140				

Lab Sample ID: MRL 380-165374/2-A
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165374

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
		MRL	MRL				
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dibromopropane (Surr)	92		60 - 140				

Lab Sample ID: MRL 380-165374/3-A
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165374

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

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MRL 380-165374/3-A
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 165374

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.0100	0.00866	J	ug/L		87	60 - 140
1,2-Dibromoethane	0.0100	0.00862	J	ug/L		86	60 - 140
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
1,2-Dibromopropane (Surr)	91		60 - 140				

Lab Sample ID: 380-162168-T-1-A MS
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 165374

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.26	1.29		ug/L		102	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.252	0.213		ug/L		84	65 - 135
1,2-Dibromoethane	<0.010		0.252	0.223		ug/L		89	65 - 135
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dibromopropane (Surr)	90		60 - 140						

Lab Sample ID: 380-162401-G-1-A DU
Matrix: Water
Analysis Batch: 165590

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 165374

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1,2,3-Trichloropropane	<0.020		<0.021		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.010		<0.010		ug/L		NC	20
1,2-Dibromoethane	<0.010		<0.010		ug/L		NC	20
Surrogate	DU %Recovery	DU Qualifier	Limits					
1,2-Dibromopropane (Surr)	89		60 - 140					

Method: 505 - Organochlorine Pesticides/PCBs (GC)

Lab Sample ID: MB 380-164806/32-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 164806

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Toxaphene	<0.50		0.50	ug/L		07/24/25 09:57	07/24/25 21:20	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1016	<0.070		0.070	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1221	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1232	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1242	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1248	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1254	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1
PCB-1260	<0.070		0.070	ug/L		07/24/25 09:57	07/24/25 21:20	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		07/24/25 09:57	07/24/25 21:20	1

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 380-164806/32-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 164806

	MB	MB					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
<i>Tetrachloro-m-xylene</i>	103		70 - 130	07/24/25 09:57	07/24/25 21:20	1	

Lab Sample ID: LCS 380-164806/16-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chlordane (n.o.s.)	0.500	0.498		ug/L		100	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
<i>Tetrachloro-m-xylene</i>	105		70 - 130				

Lab Sample ID: LCS 380-164806/24-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
PCB-1232	0.500	0.511		ug/L		102	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
<i>Tetrachloro-m-xylene</i>	99		70 - 130				

Lab Sample ID: LCS 380-164806/57-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Toxaphene	2.50	2.34		ug/L		93	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
<i>Tetrachloro-m-xylene</i>	92		70 - 130				

Lab Sample ID: LCS 380-164806/59-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chlordane (n.o.s.)	0.500	0.462		ug/L		92	70 - 130
Surrogate	%Recovery	Qualifier	Limits				
<i>Tetrachloro-m-xylene</i>	99		70 - 130				

QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-164806/60-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1232	0.500	0.516		ug/L		103	70 - 130
Surrogate							
	%Recovery	LCS Qualifier	LCS	Limits			
<i>Tetrachloro-m-xylene</i>	102			70 - 130			

Lab Sample ID: LCS 380-164806/8-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	2.50	2.52		ug/L		101	70 - 130
Surrogate							
	%Recovery	LCS Qualifier	LCS	Limits			
<i>Tetrachloro-m-xylene</i>	91			70 - 130			

Lab Sample ID: LCSD 380-164806/58-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	2.50	2.52		ug/L		101	70 - 130	8	20
Surrogate									
	%Recovery	LCSD Qualifier	LCSD	Limits					
<i>Tetrachloro-m-xylene</i>	107			70 - 130					

Lab Sample ID: MRL 380-164806/30-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	0.500	0.502		ug/L		100	50 - 150
Surrogate							
	%Recovery	MRL Qualifier	MRL	Limits			
<i>Tetrachloro-m-xylene</i>	101			70 - 130			

Lab Sample ID: MRL 380-164806/31-A
Matrix: Water
Analysis Batch: 164939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 164806

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.100	0.110		ug/L		110	50 - 150
Surrogate							
	%Recovery	MRL Qualifier	MRL	Limits			
<i>Tetrachloro-m-xylene</i>	99			70 - 130			

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MB 570-603290/1-A
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 603290

	MB	MB							
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>			
<i>n-Octacosane (Surr)</i>	106		60 - 130	07/28/25 09:17	08/05/25 00:25	1			

Lab Sample ID: LCS 570-603290/2-A
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603290

<u>Analyte</u>	<u>Spike Added</u>	<u>LCS Result</u>	<u>LCS Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>Limits</u>		
C10-C28	1600	1590		ug/L		100	56 - 127		
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>						
<i>n-Octacosane (Surr)</i>	101		60 - 130						

Lab Sample ID: LCSD 570-603290/3-A
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 603290

<u>Analyte</u>	<u>Spike Added</u>	<u>LCSD Result</u>	<u>LCSD Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>Limits</u>	<u>RPD</u>	<u>Limit</u>
C10-C28	1600	1520		ug/L		95	56 - 127	5	23
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>						
<i>n-Octacosane (Surr)</i>	103		60 - 130						

Lab Sample ID: MRL 570-603290/4-A
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 603290

<u>Analyte</u>	<u>Spike Added</u>	<u>MRL Result</u>	<u>MRL Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>Limits</u>		
C10-C28	0.0200	0.0237	J	mg/L		119	50 - 150		
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>						
<i>n-Octacosane (Surr)</i>	107		60 - 130						

Lab Sample ID: 380-162172-C-1-A MS
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 603290

<u>Analyte</u>	<u>Sample Result</u>	<u>Sample Qualifier</u>	<u>Spike Added</u>	<u>MS Result</u>	<u>MS Qualifier</u>	<u>Unit</u>	<u>D</u>	<u>%Rec</u>	<u>Limits</u>
C10-C28	<26		1660	1710		ug/L		103	70 - 130
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>						
<i>n-Octacosane (Surr)</i>	111		60 - 130						

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162172-C-1-B MSD
Matrix: Water
Analysis Batch: 606862

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 603290

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26		1680	1640		ug/L		98	70 - 130	4	20
Surrogate	MSD %Recovery		MSD Qualifier						Limits		
<i>n-Octacosane (Surr)</i>	105								60 - 130		

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

Lab Sample ID: MB 570-605797/4
Matrix: Water
Analysis Batch: 605797

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			08/01/25 18:28	1	
Surrogate	MB %Recovery		MB Qualifier				Prepared	Analyzed	Dil Fac
<i>Hexafluoro-2-propanol (Surr)</i>	105						08/01/25 18:28	1	

Lab Sample ID: LCS 570-605797/5
Matrix: Water
Analysis Batch: 605797

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	2.62		mg/L		131	78 - 131
Surrogate	LCS %Recovery		LCS Qualifier				Limits
<i>Hexafluoro-2-propanol (Surr)</i>	110						54 - 120

Lab Sample ID: LCSD 570-605797/6
Matrix: Water
Analysis Batch: 605797

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol	2.00	2.59		mg/L		129	78 - 131	1	25
Surrogate	LCSD %Recovery		LCSD Qualifier				Limits		
<i>Hexafluoro-2-propanol (Surr)</i>	98						54 - 120		

Lab Sample ID: 570-240011-J-1 MS
Matrix: Water
Analysis Batch: 605797

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
Ethanol	<0.10		2.00	2.54		mg/L		127	20 - 173
Surrogate	MS %Recovery		MS Qualifier						Limits
<i>Hexafluoro-2-propanol (Surr)</i>	101								54 - 120

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 570-240011-J-1 MSD
Matrix: Water
Analysis Batch: 605797

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
Ethanol	<0.10		2.00	2.51		mg/L		126	20 - 173	1	21
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Hexafluoro-2-propanol (Surr)	103		54 - 120								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 380-164671/41
Matrix: Water
Analysis Batch: 164671

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			07/23/25 22:46	1
Nitrite as N	<0.050		0.050	mg/L			07/23/25 22:46	1

Lab Sample ID: LCS 380-164671/44
Matrix: Water
Analysis Batch: 164671

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	2.55		mg/L		102	90 - 110
Nitrite as N	1.00	0.975		mg/L		97	90 - 110

Lab Sample ID: LCSD 380-164671/45
Matrix: Water
Analysis Batch: 164671

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	2.55		mg/L		102	90 - 110	0	20
Nitrite as N	1.00	1.01		mg/L		101	90 - 110	3	20

Lab Sample ID: MRL 380-164671/42
Matrix: Water
Analysis Batch: 164671

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	0.0121	J	mg/L		97	50 - 150
Nitrite as N	0.0125	0.0106	J	mg/L		85	50 - 150

Lab Sample ID: MRL 380-164671/43
Matrix: Water
Analysis Batch: 164671

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	0.0464	J	mg/L		93	50 - 150
Nitrite as N	0.0500	0.0423	J	mg/L		85	50 - 150

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-162299-AG-1 MS
Matrix: Water
Analysis Batch: 164671

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	<0.050		1.25	1.22		mg/L		94	80 - 120
Nitrite as N	<0.050		0.500	0.438		mg/L		88	80 - 120

Lab Sample ID: 380-162299-AG-1 MSD
Matrix: Water
Analysis Batch: 164671

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	<0.050		1.25	1.25		mg/L		96	80 - 120	2	20
Nitrite as N	<0.050		0.500	0.447		mg/L		89	80 - 120	2	20

Lab Sample ID: MB 380-164672/41
Matrix: Water
Analysis Batch: 164672

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			07/23/25 22:46	1
Sulfate	<0.25		0.25	mg/L			07/23/25 22:46	1

Lab Sample ID: LCS 380-164672/44
Matrix: Water
Analysis Batch: 164672

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	25.6		mg/L		103	90 - 110
Sulfate	50.0	51.2		mg/L		102	90 - 110

Lab Sample ID: LCSD 380-164672/45
Matrix: Water
Analysis Batch: 164672

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	25.7		mg/L		103	90 - 110	0	20
Sulfate	50.0	51.1		mg/L		102	90 - 110	0	20

Lab Sample ID: MRL 380-164672/42
Matrix: Water
Analysis Batch: 164672

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	0.125	J	mg/L		100	50 - 150
Sulfate	0.250	0.233	J	mg/L		93	50 - 150

Lab Sample ID: MRL 380-164672/43
Matrix: Water
Analysis Batch: 164672

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	0.459	J	mg/L		92	50 - 150
Sulfate	1.00	0.920		mg/L		92	50 - 150

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 380-162299-AG-1 MS
Matrix: Water
Analysis Batch: 164672

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	3.6	^2	12.5	15.5		mg/L		95	80 - 120
Sulfate	15		25.0	39.6		mg/L		97	80 - 120

Lab Sample ID: 380-162299-AG-1 MSD
Matrix: Water
Analysis Batch: 164672

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	3.6	^2	12.5	16.0		mg/L		99	80 - 120	3	20
Sulfate	15		25.0	40.1		mg/L		99	80 - 120	1	20

Lab Sample ID: MB 380-165367/5
Matrix: Water
Analysis Batch: 165367

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			07/25/25 20:35	1

Lab Sample ID: LCS 380-165367/6
Matrix: Water
Analysis Batch: 165367

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	100	96.3		ug/L		96	90 - 110

Lab Sample ID: LCSD 380-165367/7
Matrix: Water
Analysis Batch: 165367

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	95.1		ug/L		95	90 - 110	1	10

Lab Sample ID: MRL 380-165367/4
Matrix: Water
Analysis Batch: 165367

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	4.56	J	ug/L		91	75 - 125

Lab Sample ID: 380-162293-1 MS
Matrix: Water
Analysis Batch: 165367

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	420		100	522	4	ug/L		103	80 - 120

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 380-162293-1 MSD
Matrix: Water
Analysis Batch: 165367

Client Sample ID: Ka'amilo Wells P1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	420		100	525	4	ug/L		106	80 - 120	1	20

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MBL 380-164965/56
Matrix: Water
Analysis Batch: 164965

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.031		0.10	mg/L			07/24/25 14:07	1
Magnesium	<0.0099		0.10	mg/L			07/24/25 14:07	1
Potassium	<0.044		0.10	mg/L			07/24/25 14:07	1
Sodium	<0.019		0.10	mg/L			07/24/25 14:07	1

Lab Sample ID: LCS 380-164965/58
Matrix: Water
Analysis Batch: 164965

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	50.4		mg/L		101	85 - 115
Magnesium	20.0	20.2		mg/L		101	85 - 115
Potassium	20.0	19.9		mg/L		99	85 - 115
Sodium	50.0	49.5		mg/L		99	85 - 115

Lab Sample ID: LCSD 380-164965/59
Matrix: Water
Analysis Batch: 164965

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	50.2		mg/L		100	85 - 115	0	20
Magnesium	20.0	20.2		mg/L		101	85 - 115	0	20
Potassium	20.0	19.9		mg/L		100	85 - 115	0	20
Sodium	50.0	49.6		mg/L		99	85 - 115	0	20

Lab Sample ID: LLCS 380-164965/57
Matrix: Water
Analysis Batch: 164965

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.100	0.102		mg/L		102	50 - 150
Magnesium	0.100	0.0976	J	mg/L		98	50 - 150
Potassium	0.100	0.119		mg/L		119	50 - 150
Sodium	0.100	0.100		mg/L		100	50 - 150

Lab Sample ID: 380-162322-A-5 MS
Matrix: Water
Analysis Batch: 164965

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	42		50.0	89.0		mg/L		94	70 - 130

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162322-A-5 MS
Matrix: Water
Analysis Batch: 164965

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	8.4		20.0	27.8		mg/L		97	70 - 130
Potassium	2.4		20.0	21.8		mg/L		97	70 - 130
Sodium	33		50.0	80.0		mg/L		93	70 - 130

Lab Sample ID: 380-162322-A-5 MSD
Matrix: Water
Analysis Batch: 164965

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	42		50.0	89.8		mg/L		96	70 - 130	1	20
Magnesium	8.4		20.0	28.1		mg/L		99	70 - 130	1	20
Potassium	2.4		20.0	22.1		mg/L		99	70 - 130	1	20
Sodium	33		50.0	80.7		mg/L		95	70 - 130	1	20

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MBL 380-165352/184
Matrix: Water
Analysis Batch: 165352

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			07/26/25 20:40	1
Arsenic	<0.25		1.0	ug/L			07/26/25 20:40	1
Beryllium	<0.12		0.30	ug/L			07/26/25 20:40	1
Cadmium	<0.081		0.50	ug/L			07/26/25 20:40	1
Chromium	<0.33		0.90	ug/L			07/26/25 20:40	1
Copper	<0.28		1.0	ug/L			07/26/25 20:40	1
Lead	<0.084		0.50	ug/L			07/26/25 20:40	1
Nickel	<0.38		1.0	ug/L			07/26/25 20:40	1
Selenium	<0.25		2.0	ug/L			07/26/25 20:40	1
Silver	<0.30		0.50	ug/L			07/26/25 20:40	1
Thallium	<0.10		0.30	ug/L			07/26/25 20:40	1
Zinc	<1.3		5.0	ug/L			07/26/25 20:40	1

Lab Sample ID: LCS 380-165352/186
Matrix: Water
Analysis Batch: 165352

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	51.7		ug/L		103	85 - 115
Arsenic	50.0	52.8		ug/L		106	85 - 115
Beryllium	50.0	55.2		ug/L		110	85 - 115
Cadmium	50.0	51.8		ug/L		104	85 - 115
Chromium	50.0	50.2		ug/L		100	85 - 115
Copper	50.0	49.8		ug/L		100	85 - 115
Lead	50.0	51.9		ug/L		104	85 - 115
Nickel	50.0	50.1		ug/L		100	85 - 115
Selenium	50.0	52.0		ug/L		104	85 - 115
Silver	50.0	51.5		ug/L		103	85 - 115
Thallium	50.0	52.1		ug/L		104	85 - 115

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-165352/186
Matrix: Water
Analysis Batch: 165352

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	50.0	49.5		ug/L		99	85 - 115

Lab Sample ID: LCSD 380-165352/187
Matrix: Water
Analysis Batch: 165352

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	51.3		ug/L		103	85 - 115	1	20
Arsenic	50.0	52.4		ug/L		105	85 - 115	1	20
Beryllium	50.0	54.5		ug/L		109	85 - 115	1	20
Cadmium	50.0	51.0		ug/L		102	85 - 115	2	20
Chromium	50.0	49.6		ug/L		99	85 - 115	1	20
Copper	50.0	49.6		ug/L		99	85 - 115	0	20
Lead	50.0	51.7		ug/L		103	85 - 115	0	20
Nickel	50.0	49.5		ug/L		99	85 - 115	1	20
Selenium	50.0	51.7		ug/L		103	85 - 115	1	20
Silver	50.0	50.9		ug/L		102	85 - 115	1	20
Thallium	50.0	51.6		ug/L		103	85 - 115	1	20
Zinc	50.0	49.3		ug/L		99	85 - 115	0	20

Lab Sample ID: LLCS 380-165352/185
Matrix: Water
Analysis Batch: 165352

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	1.05		ug/L		105	50 - 150
Arsenic	1.00	1.03		ug/L		103	50 - 150
Beryllium	0.300	0.333		ug/L		111	50 - 150
Cadmium	0.500	0.447	J	ug/L		89	50 - 150
Chromium	0.900	0.896	J	ug/L		100	50 - 150
Copper	1.00	1.01		ug/L		101	50 - 150
Lead	0.500	0.542		ug/L		108	50 - 150
Nickel	1.00	0.989	J	ug/L		99	50 - 150
Selenium	2.00	2.11		ug/L		105	50 - 150
Silver	0.500	0.509		ug/L		102	50 - 150
Thallium	0.300	0.313		ug/L		104	50 - 150
Zinc	5.00	4.87	J	ug/L		97	50 - 150

Lab Sample ID: 380-162735-A-1 MS
Matrix: Water
Analysis Batch: 165352

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	58.4		ug/L		117	70 - 130
Beryllium	<0.30		50.0	44.0		ug/L		88	70 - 130
Cadmium	<0.50		50.0	52.6		ug/L		105	70 - 130
Chromium	<0.90		50.0	49.5		ug/L		98	70 - 130
Copper	<1.0		50.0	47.5		ug/L		94	70 - 130

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QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162735-A-1 MS
Matrix: Water
Analysis Batch: 165352

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
Lead	<0.50		50.0	49.0		ug/L		97	70 - 130
Nickel	<1.0		50.0	47.8		ug/L		96	70 - 130
Selenium	<2.0		50.0	63.4		ug/L		126	70 - 130
Silver	<0.50		50.0	47.8		ug/L		96	70 - 130
Thallium	<0.30		50.0	49.8		ug/L		100	70 - 130
Zinc	14		50.0	67.0		ug/L		105	70 - 130

Lab Sample ID: 380-162735-A-1 MSD
Matrix: Water
Analysis Batch: 165352

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	51.9		ug/L		104	70 - 130	1	20
Arsenic	<1.0		50.0	58.6		ug/L		117	70 - 130	0	20
Beryllium	<0.30		50.0	43.4		ug/L		87	70 - 130	1	20
Cadmium	<0.50		50.0	53.1		ug/L		106	70 - 130	1	20
Chromium	<0.90		50.0	49.5		ug/L		98	70 - 130	0	20
Copper	<1.0		50.0	47.5		ug/L		94	70 - 130	0	20
Lead	<0.50		50.0	49.5		ug/L		99	70 - 130	1	20
Nickel	<1.0		50.0	47.7		ug/L		95	70 - 130	0	20
Selenium	<2.0		50.0	63.9		ug/L		127	70 - 130	1	20
Silver	<0.50		50.0	49.3		ug/L		99	70 - 130	3	20
Thallium	<0.30		50.0	50.0		ug/L		100	70 - 130	0	20
Zinc	14		50.0	67.4		ug/L		106	70 - 130	1	20

Method: 200.8 - Mercury (ICP/MS)

Lab Sample ID: MBL 380-164852/1-A
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	ug/L		07/24/25 10:51	07/25/25 09:00	1

Lab Sample ID: LCS 380-164852/3-A
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.08		ug/L		108	85 - 115

Lab Sample ID: LCSD 380-164852/4-A
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Lab Control Sample Dup
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	1.08		ug/L		108	85 - 115	0	20

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LLCS 380-164852/2-A
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	0.217		ug/L		109	50 - 150

Lab Sample ID: 380-161937-B-5-C MS
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	<0.20		1.00	1.06		ug/L		106	70 - 130

Lab Sample ID: 380-161937-B-5-D MSD
Matrix: Water
Analysis Batch: 165212

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 164852

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Mercury	<0.20		1.00	1.05		ug/L		105	70 - 130	1	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 380-165380/1
Matrix: Water
Analysis Batch: 165380

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	<4.0		4.0	mg/L			07/25/25 17:48	1
Bicarbonate Alkalinity as CaCO3	<4.0		4.0	mg/L			07/25/25 17:48	1
Carbonate Alkalinity as CaCO3	<4.0		4.0	mg/L			07/25/25 17:48	1

Lab Sample ID: LCS 380-165380/4
Matrix: Water
Analysis Batch: 165380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	96.0		mg/L		96	90 - 110

Lab Sample ID: LCSD 380-165380/19
Matrix: Water
Analysis Batch: 165380

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Alkalinity	100	96.5		mg/L		96	90 - 110	1	20

Lab Sample ID: LLCS 380-165380/5
Matrix: Water
Analysis Batch: 165380

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	18.7		mg/L		94	90 - 110

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: MRL 380-165380/3
Matrix: Water
Analysis Batch: 165380

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	4.00	3.41	J	mg/L		85	50 - 150

Lab Sample ID: 380-161930-R-1 MS
Matrix: Water
Analysis Batch: 165380

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	68		100	165		mg/L		97	80 - 120

Lab Sample ID: 380-161930-R-1 MSD
Matrix: Water
Analysis Batch: 165380

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	68		100	164		mg/L		96	80 - 120	1	20

Lab Sample ID: 380-161930-R-1 DU
Matrix: Water
Analysis Batch: 165380

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	68		67.7		mg/L		0	20
Bicarbonate Alkalinity as CaCO3	<4.0		<4.0		mg/L		NC	20
Carbonate Alkalinity as CaCO3	66		65.1		mg/L		0.7	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 380-165383/3
Matrix: Water
Analysis Batch: 165383

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	<2.0		2.0	umhos/cm			07/25/25 17:48	1

Lab Sample ID: LCS 380-165383/5
Matrix: Water
Analysis Batch: 165383

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	1000	990		umhos/cm		99	90 - 110

Lab Sample ID: LCSD 380-165383/17
Matrix: Water
Analysis Batch: 165383

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Specific Conductance	1000	984		umhos/cm		98	90 - 110	1	10

QC Sample Results

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: MRL 380-165383/4
Matrix: Water
Analysis Batch: 165383

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

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

Lab Sample ID: 380-162314-M-1 DU
Matrix: Water
Analysis Batch: 165383

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	22		22.1		umhos/cm		0.5	20

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

Lab Sample ID: MB 380-164932/1
Matrix: Water
Analysis Batch: 164932

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10	mg/L			07/24/25 15:30	1

Lab Sample ID: HLCS 380-164932/5
Matrix: Water
Analysis Batch: 164932

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	684		mg/L		98	80 - 114

Lab Sample ID: LCS 380-164932/4
Matrix: Water
Analysis Batch: 164932

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	158		mg/L		90	80 - 114

Lab Sample ID: MRL 380-164932/2
Matrix: Water
Analysis Batch: 164932

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	9.00	J	mg/L		90	50 - 150

Lab Sample ID: MRL 380-164932/3
Matrix: Water
Analysis Batch: 164932

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

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

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162322-G-1 DU
Matrix: Water
Analysis Batch: 164932

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	250		254		mg/L		0	10

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 380-165047/74
Matrix: Water
Analysis Batch: 165047

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			07/24/25 21:56	1

Lab Sample ID: LCS 380-165047/76
Matrix: Water
Analysis Batch: 165047

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 380-165047/77
Matrix: Water
Analysis Batch: 165047

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 380-165047/75
Matrix: Water
Analysis Batch: 165047

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	0.0492	J	mg/L		98	50 - 150

Lab Sample ID: 380-162414-F-1 MS
Matrix: Water
Analysis Batch: 165047

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	0.68		1.00	1.67		mg/L		98	80 - 120

Lab Sample ID: 380-162414-F-1 MSD
Matrix: Water
Analysis Batch: 165047

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	0.68		1.00	1.68		mg/L		100	80 - 120	1	20

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 380-165564/6
Matrix: Water
Analysis Batch: 165564

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			07/28/25 13:05	1

Lab Sample ID: LCS 380-165564/8
Matrix: Water
Analysis Batch: 165564

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	1.04		mg/L		104	90 - 110

Lab Sample ID: LCSD 380-165564/9
Matrix: Water
Analysis Batch: 165564

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	1.03		mg/L		103	90 - 110	0	10

Lab Sample ID: MRL 380-165564/7
Matrix: Water
Analysis Batch: 165564

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	0.0506		mg/L		101	50 - 150

Lab Sample ID: 380-161065-K-1 MS
Matrix: Water
Analysis Batch: 165564

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	<0.050		1.00	1.02		mg/L		102	80 - 120

Lab Sample ID: 380-161065-K-1 MSD
Matrix: Water
Analysis Batch: 165564

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	<0.050		1.00	1.03		mg/L		103	80 - 120	0	20

Method: SM 4500 H+ B - pH

Lab Sample ID: MB 380-165386/5
Matrix: Water
Analysis Batch: 165386

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.7			SU			07/25/25 17:48	1

QC Sample Results

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: LCS 380-165386/6
Matrix: Water
Analysis Batch: 165386

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		101	98 - 102

Lab Sample ID: LCSD 380-165386/18
Matrix: Water
Analysis Batch: 165386

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		101	98 - 102	0	2

Lab Sample ID: 380-161930-R-1 DU
Matrix: Water
Analysis Batch: 165386

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	10		10		SU		0.2	2

Method: SM 4500 S2 D - Sulfide, Total

Lab Sample ID: MB 380-165675/3
Matrix: Water
Analysis Batch: 165675

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	<0.050		0.050	mg/L			07/29/25 16:40	1

Lab Sample ID: LCS 380-165675/5
Matrix: Water
Analysis Batch: 165675

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	0.264		mg/L		105	90 - 110

Lab Sample ID: LCSD 380-165675/6
Matrix: Water
Analysis Batch: 165675

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	0.273		mg/L		109	90 - 110	4	20

Lab Sample ID: MRL 380-165675/4
Matrix: Water
Analysis Batch: 165675

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: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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

Lab Sample ID: 380-162293-1 MS
Matrix: Water
Analysis Batch: 165675

Client Sample ID: Ka'amilo Wells P1
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	0.160	F1	mg/L		64	80 - 120

Lab Sample ID: 380-162293-1 MSD
Matrix: Water
Analysis Batch: 165675

Client Sample ID: Ka'amilo Wells P1
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	0.179	F1	mg/L		72	80 - 120	11	20



QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

GC/MS VOA

Analysis Batch: 165358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-165358/13	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-165358/14	Lab Control Sample	Total/NA	Water	524.2	

Analysis Batch: 165463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	524.2	
380-162293-3	TB: Ka'amilo Wells P1	Total/NA	Water	524.2	
MB 380-165463/5	Method Blank	Total/NA	Water	524.2	
LCS 380-165463/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-165463/4	Lab Control Sample Dup	Total/NA	Water	524.2	

Analysis Batch: 165793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	524.2	

GC/MS Semi VOA

Prep Batch: 165237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	525.2	
MB 380-165237/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-165237/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-165237/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-162293-1 MS	Ka'amilo Wells P1	Total/NA	Water	525.2	
380-162293-1 MSD	Ka'amilo Wells P1	Total/NA	Water	525.2	

Analysis Batch: 165311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	525.2	165237
MB 380-165237/21-A	Method Blank	Total/NA	Water	525.2	165237
LCS 380-165237/23-A	Lab Control Sample	Total/NA	Water	525.2	165237
MRL 380-165237/22-A	Lab Control Sample	Total/NA	Water	525.2	165237
380-162293-1 MS	Ka'amilo Wells P1	Total/NA	Water	525.2	165237
380-162293-1 MSD	Ka'amilo Wells P1	Total/NA	Water	525.2	165237

Prep Batch: 601667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	625.1	
MB 570-601667/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-601667/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-601667/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-162185-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-162185-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 604257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	625.1 SIM	601667
MB 570-601667/1-A	Method Blank	Total/NA	Water	625.1 SIM	601667
LCS 570-601667/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	601667
LCSD 570-601667/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	601667
380-162185-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	601667

QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

GC/MS Semi VOA (Continued)

Analysis Batch: 604257 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162185-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	601667

Analysis Batch: 606410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	625.1	601667
MB 570-601667/1-A	Method Blank	Total/NA	Water	625.1	601667

GC VOA

Analysis Batch: 606111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	8015B GRO LL	
380-162293-3	TB: Ka'amilo Wells P1	Total/NA	Water	8015B GRO LL	
MB 570-606111/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-606111/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-606111/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-606111/11	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-162172-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-162172-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 164806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	505	
MB 380-164806/32-A	Method Blank	Total/NA	Water	505	
LCS 380-164806/16-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-164806/24-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-164806/57-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-164806/59-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-164806/60-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-164806/8-A	Lab Control Sample	Total/NA	Water	505	
LCSD 380-164806/58-A	Lab Control Sample Dup	Total/NA	Water	505	
MRL 380-164806/30-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-164806/31-A	Lab Control Sample	Total/NA	Water	505	
380-162109-C-1-A MS	Matrix Spike	Total/NA	Water	505	
380-162109-D-1-A MS	Matrix Spike	Total/NA	Water	505	
380-162292-L-1-A MS	Matrix Spike	Total/NA	Water	505	
380-162292-M-1-A MS	Matrix Spike	Total/NA	Water	505	

Prep Batch: 164927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	504.1	
MBL 380-164927/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-164927/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-164927/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-164927/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-161837-F-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-162292-H-1-A DU	Duplicate	Total/NA	Water	504.1	

QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

GC Semi VOA

Analysis Batch: 164939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	505	164806
MB 380-164806/32-A	Method Blank	Total/NA	Water	505	164806
LCS 380-164806/16-A	Lab Control Sample	Total/NA	Water	505	164806
LCS 380-164806/24-A	Lab Control Sample	Total/NA	Water	505	164806
LCS 380-164806/57-A	Lab Control Sample	Total/NA	Water	505	164806
LCS 380-164806/59-A	Lab Control Sample	Total/NA	Water	505	164806
LCS 380-164806/60-A	Lab Control Sample	Total/NA	Water	505	164806
LCS 380-164806/8-A	Lab Control Sample	Total/NA	Water	505	164806
LCSD 380-164806/58-A	Lab Control Sample Dup	Total/NA	Water	505	164806
MRL 380-164806/30-A	Lab Control Sample	Total/NA	Water	505	164806
MRL 380-164806/31-A	Lab Control Sample	Total/NA	Water	505	164806
380-162109-C-1-A MS	Matrix Spike	Total/NA	Water	505	164806
380-162109-D-1-A MS	Matrix Spike	Total/NA	Water	505	164806
380-162292-L-1-A MS	Matrix Spike	Total/NA	Water	505	164806
380-162292-M-1-A MS	Matrix Spike	Total/NA	Water	505	164806

Analysis Batch: 165162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	504.1	164927
MBL 380-164927/4-A	Method Blank	Total/NA	Water	504.1	164927
LCS 380-164927/29-A	Lab Control Sample	Total/NA	Water	504.1	164927
MRL 380-164927/2-A	Lab Control Sample	Total/NA	Water	504.1	164927
MRL 380-164927/3-A	Lab Control Sample	Total/NA	Water	504.1	164927
380-161837-F-1-A MS	Matrix Spike	Total/NA	Water	504.1	164927
380-162292-H-1-A DU	Duplicate	Total/NA	Water	504.1	164927

Prep Batch: 165374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-3	TB: Ka'amilo Wells P1	Total/NA	Water	504.1	
MBL 380-165374/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-165374/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-165374/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-165374/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-162168-T-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-162401-G-1-A DU	Duplicate	Total/NA	Water	504.1	

Analysis Batch: 165590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-3	TB: Ka'amilo Wells P1	Total/NA	Water	504.1	165374
MBL 380-165374/4-A	Method Blank	Total/NA	Water	504.1	165374
LCS 380-165374/29-A	Lab Control Sample	Total/NA	Water	504.1	165374
MRL 380-165374/2-A	Lab Control Sample	Total/NA	Water	504.1	165374
MRL 380-165374/3-A	Lab Control Sample	Total/NA	Water	504.1	165374
380-162168-T-1-A MS	Matrix Spike	Total/NA	Water	504.1	165374
380-162401-G-1-A DU	Duplicate	Total/NA	Water	504.1	165374

Prep Batch: 603290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	3510C	
MB 570-603290/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-603290/2-A	Lab Control Sample	Total/NA	Water	3510C	

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QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

GC Semi VOA (Continued)

Prep Batch: 603290 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-603290/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-603290/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-162172-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-162172-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 605797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	8015B	
MB 570-605797/4	Method Blank	Total/NA	Water	8015B	
LCS 570-605797/5	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-605797/6	Lab Control Sample Dup	Total/NA	Water	8015B	
570-240011-J-1 MS	Matrix Spike	Total/NA	Water	8015B	
570-240011-J-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

Analysis Batch: 606862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	8015B	603290
MB 570-603290/1-A	Method Blank	Total/NA	Water	8015B	603290
LCS 570-603290/2-A	Lab Control Sample	Total/NA	Water	8015B	603290
LCSD 570-603290/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	603290
MRL 570-603290/4-A	Lab Control Sample	Total/NA	Water	8015B	603290
380-162172-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	603290
380-162172-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	603290

HPLC/IC

Analysis Batch: 164671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	300.0	
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	300.0	
MB 380-164671/41	Method Blank	Total/NA	Water	300.0	
LCS 380-164671/44	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-164671/45	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-164671/42	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-164671/43	Lab Control Sample	Total/NA	Water	300.0	
380-162299-AG-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-162299-AG-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

Analysis Batch: 164672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	300.0	
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	300.0	
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	300.0	
MB 380-164672/41	Method Blank	Total/NA	Water	300.0	
LCS 380-164672/44	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-164672/45	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-164672/42	Lab Control Sample	Total/NA	Water	300.0	
MRL 380-164672/43	Lab Control Sample	Total/NA	Water	300.0	
380-162299-AG-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-162299-AG-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

HPLC/IC

Analysis Batch: 165367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	300.0	
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	300.0	
MB 380-165367/5	Method Blank	Total/NA	Water	300.0	
LCS 380-165367/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-165367/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-165367/4	Lab Control Sample	Total/NA	Water	300.0	
380-162293-1 MS	Ka'amilo Wells P1	Total/NA	Water	300.0	
380-162293-1 MSD	Ka'amilo Wells P1	Total/NA	Water	300.0	

Metals

Prep Batch: 164852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total Recoverable	Water	200.8	
MBL 380-164852/1-A	Method Blank	Total Recoverable	Water	200.8	
LCS 380-164852/3-A	Lab Control Sample	Total Recoverable	Water	200.8	
LCSD 380-164852/4-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	
LLCS 380-164852/2-A	Lab Control Sample	Total Recoverable	Water	200.8	
380-161937-B-5-C MS	Matrix Spike	Total Recoverable	Water	200.8	
380-161937-B-5-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	

Analysis Batch: 164965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	200.7 Rev 4.4	
MBL 380-164965/56	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-164965/58	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-164965/59	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-164965/57	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-162322-A-5 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-162322-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

Analysis Batch: 165212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total Recoverable	Water	200.8	164852
MBL 380-164852/1-A	Method Blank	Total Recoverable	Water	200.8	164852
LCS 380-164852/3-A	Lab Control Sample	Total Recoverable	Water	200.8	164852
LCSD 380-164852/4-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	164852
LLCS 380-164852/2-A	Lab Control Sample	Total Recoverable	Water	200.8	164852
380-161937-B-5-C MS	Matrix Spike	Total Recoverable	Water	200.8	164852
380-161937-B-5-D MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	164852

Analysis Batch: 165352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	200.8	
MBL 380-165352/184	Method Blank	Total/NA	Water	200.8	
LCS 380-165352/186	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-165352/187	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-165352/185	Lab Control Sample	Total/NA	Water	200.8	
380-162735-A-1 MS	Matrix Spike	Total/NA	Water	200.8	
380-162735-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

General Chemistry

Analysis Batch: 164932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 2540C	
MB 380-164932/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-164932/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-164932/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-164932/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-164932/3	Lab Control Sample	Total/NA	Water	SM 2540C	
380-162322-G-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 165047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 4500 F C	
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Total/NA	Drinking Water	SM 4500 F C	
MB 380-165047/74	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-165047/76	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-165047/77	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-165047/75	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-162414-F-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-162414-F-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 165380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 2320B	
MB 380-165380/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-165380/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-165380/19	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-165380/5	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-165380/3	Lab Control Sample	Total/NA	Water	SM 2320B	
380-161930-R-1 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-161930-R-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-161930-R-1 DU	Duplicate	Total/NA	Water	SM 2320B	

Analysis Batch: 165383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 2510B	
MB 380-165383/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-165383/5	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-165383/17	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-165383/4	Lab Control Sample	Total/NA	Water	SM 2510B	
380-162314-M-1 DU	Duplicate	Total/NA	Water	SM 2510B	

Analysis Batch: 165386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 4500 H+ B	
MB 380-165386/5	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-165386/6	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-165386/18	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-161930-R-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 165564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-165564/6	Method Blank	Total/NA	Water	SM 4500 F C	

QC Association Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

General Chemistry (Continued)

Analysis Batch: 165564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 380-165564/8	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-165564/9	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-165564/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-161065-K-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-161065-K-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 165675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-162293-1	Ka'amilo Wells P1	Total/NA	Water	SM 4500 S2 D	
MB 380-165675/3	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-165675/5	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-165675/6	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-165675/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-162293-1 MS	Ka'amilo Wells P1	Total/NA	Water	SM 4500 S2 D	
380-162293-1 MSD	Ka'amilo Wells P1	Total/NA	Water	SM 4500 S2 D	

Lab Chronicle

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: Ka'amilo Wells P1
Date Collected: 07/22/25 10:02
Date Received: 07/23/25 09:30

Lab Sample ID: 380-162293-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	165463	Q6AD	EA POM	07/29/25 01:13
Total/NA	Analysis	524.2		1	165793	BS7X	EA POM	07/29/25 01:13
Total/NA	Prep	525.2			165237	KRD3	EA POM	07/27/25 11:32
Total/NA	Analysis	525.2		1	165311	Q8LA	EA POM	07/28/25 08:42
Total/NA	Prep	625.1			601667	H1SH	EET CAL 4	07/25/25 05:11
Total/NA	Analysis	625.1		1	606410	AX7Z	EET CAL 4	08/04/25 17:52
Total/NA	Prep	625.1			601667	H1SH	EET CAL 4	07/25/25 05:11
Total/NA	Analysis	625.1 SIM		1	604257	J7WE	EET CAL 4	07/30/25 07:09
Total/NA	Analysis	8015B GRO LL		1	606111	W4LC	EET CAL 4	08/02/25 17:01
Total/NA	Prep	504.1			164927	GVC6	EA POM	07/24/25 16:41 - 07/24/25 18:19 ¹
Total/NA	Analysis	504.1		1	165162	LZ8Q	EA POM	07/25/25 13:32
Total/NA	Prep	505			164806	DR5R	EA POM	07/24/25 09:57 - 07/24/25 11:21 ¹
Total/NA	Analysis	505		1	164939	DR5R	EA POM	07/25/25 02:19
Total/NA	Prep	3510C			603290	TVD6	EET CAL 4	07/28/25 09:17
Total/NA	Analysis	8015B		1	606862	NR	EET CAL 4	08/05/25 05:31
Total/NA	Analysis	8015B		1	605797	UJ3K	EET CAL 4	08/02/25 00:07
Total/NA	Analysis	300.0		2	165367	XLG4	EA POM	07/25/25 21:55
Total/NA	Analysis	300.0		5	164671	BG6L	EA POM	07/24/25 07:27
Total/NA	Analysis	300.0		5	164672	BG6L	EA POM	07/24/25 07:27
Total/NA	Analysis	200.7 Rev 4.4		1	164965	MF7S	EA POM	07/24/25 14:27
Total Recoverable	Prep	200.8			164852	Z45W	EA POM	07/24/25 11:13
Total Recoverable	Analysis	200.8		1	165212	T8BB	EA POM	07/25/25 09:35
Total/NA	Analysis	200.8		1	165352	VB9B	EA POM	07/26/25 21:43
Total/NA	Analysis	SM 2320B		1	165380	PK4Q	EA POM	07/25/25 21:40
Total/NA	Analysis	SM 2510B		1	165383	PK4Q	EA POM	07/25/25 21:40
Total/NA	Analysis	SM 2540C		1	164932	UJRF	EA POM	07/24/25 15:30
Total/NA	Analysis	SM 4500 F C		1	165047	PK4Q	EA POM	07/24/25 23:38
Total/NA	Analysis	SM 4500 H+ B		1	165386	PK4Q	EA POM	07/25/25 21:40
Total/NA	Analysis	SM 4500 S2 D		1	165675	ZJ2C	EA POM	07/29/25 16:40

Client Sample ID: HALAWA WELLS P1 (331-023-WL065)
Date Collected: 07/22/25 09:48
Date Received: 07/23/25 09:30

Lab Sample ID: 380-162293-2
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		2	165367	XLG4	EA POM	07/25/25 23:14
Total/NA	Analysis	300.0		2	164671	BG6L	EA POM	07/24/25 06:54
Total/NA	Analysis	300.0		2	164672	BG6L	EA POM	07/24/25 06:54
Total/NA	Analysis	300.0		10	164672	BG6L	EA POM	07/24/25 07:10
Total/NA	Analysis	SM 4500 F C		1	165047	PK4Q	EA POM	07/24/25 23:20

Lab Chronicle

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Client Sample ID: TB: Ka'amilo Wells P1
Date Collected: 07/22/25 10:02
Date Received: 07/23/25 09:30

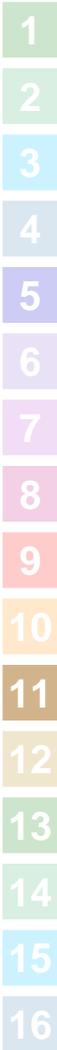
Lab Sample ID: 380-162293-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	165463	Q6AD	EA POM	07/29/25 01:36
Total/NA	Analysis	8015B GRO LL		1	606111	W4LC	EET CAL 4	08/03/25 00:02
Total/NA	Prep	504.1			165374	GVC6	EA POM	07/28/25 16:47 - 07/28/25 18:03 ¹
Total/NA	Analysis	504.1		1	165590	GVC6	EA POM	07/29/25 01:54

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
 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: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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	01-31-26

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

Accreditation/Certification Summary

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

Job ID: 380-162293-1
 SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

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
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
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	09-10-25
Oregon	NELAP	4175	09-18-25
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-25

Method Summary

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

Job ID: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Method	Method Description	Protocol	Laboratory
524.2	Total Trihalomethanes	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	Mercury (ICP/MS)	EPA	EA POM
200.8	Metals (ICP/MS)	EPA	EA POM
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
200.8	Preparation, Total Recoverable Metals	EPA	EA POM
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
504.1	Microextraction	EPA-DW	EA POM
505	Extraction, Organohalide Pesticides	EPA	EA POM
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
625.1	Liquid-Liquid Extraction	40CFR136A	EET CAL 4
None	Autocomplete Prep - Metals - No Digestion required	None	EA POM

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
 EPA = US Environmental Protection Agency
 EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.
 EPA-DW2 = "Methods For The Determination of Organic Compounds in Drinking Water - Supplement III ", EPA/600/R-95-131, August 1995
 None = None
 SM = "Standard Methods For The Examination Of Water And Wastewater"
 SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100
 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: 380-162293-1
SDG: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-162293-1	Ka'amilo Wells P1	Water	07/22/25 10:02	07/23/25 09:30	Hawaii
380-162293-2	HALAWA WELLS P1 (331-023-WL065)	Drinking Water	07/22/25 09:48	07/23/25 09:30	Hawaii
380-162293-3	TB: Ka'amilo Wells P1	Water	07/22/25 10:02	07/23/25 09:30	Hawaii

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



Environment Testing
 America

Chain of Custody Record

Client Information		Sampler: Batley	Lab P#M: Arada Rachelle	Carrier Tracking No(s):	COC No.:				
Client Contact: Kirk Iwamoto		Phone: +1 8087485840	E-Mail: Rachelle.Arada@et.euronisus.com	State of Origin:	Page: Page 2 of 2				
City & County of Honolulu		PWSID							
Address: 630 South Beretania Street, Chemistry Lab		Due Date Requested:							
City: Honolulu		TAT Requested (days)							
State, Zip: HI 96843		Compliance Project: Δ No							
Phone: 808-748-5040 (tel)		PO #: C20525101 exp 05312023							
Email: kiwamoto@hbws.org		WO #: 							
Project Name: RED-HILL		Project #: 38001111							
Site: 		SSOW#: 							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Seawater, On-water, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	504 1 PREC - Local Method	Total Number of Containers	Special Instructions/Note
Kaamilo Wells P1				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Halawa Wells P1				Water	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
TB Kaamilo Wells P1	22-Jul-2025	1002			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
TB Halawa Wells P1	22-Jul-2025				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
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)									
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: Method of Shipment: FED Ex 1 8829 8452 1608 Date/Time: 07/23/25 09:30 Company: EGAR Date/Time: 07/23/25 09:30 Company:									
Empty Kit Relinquished by Relinquished by: batley Date/Time: 22 JUL 2025 Company: HBWS Relinquished by: Date/Time: Company:									
Custody Seals Intact: Δ Yes Δ No ASIA 0.9:0.0:0.7 (E) 2.2:0.0:2.2									



Ver 01/16/2019

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-162293-1

SDG Number: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Login Number: 162293

List Number: 1

Creator: Segura, Ryan

List Source: Eurofins Eaton Analytical Pomona

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-162293-1

SDG Number: Quarterly: Ka'amilo Wells P1/Halawa Wells P1

Login Number: 162293

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 07/24/25 01:21 PM

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