

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

RED-HILL  
Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1  
RUSH Weekly Red Hill

## JOB NUMBER

380-174497-1

# Eurofins Eaton Analytical Pomona

## Job Notes

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

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

## Compliance Statement

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

## Authorization



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# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	6
Detection Summary . . . . .	8
Client Sample Results . . . . .	10
Action Limit Summary . . . . .	29
Surrogate Summary . . . . .	34
QC Sample Results . . . . .	40
QC Association Summary . . . . .	98
Lab Chronicle . . . . .	106
Certification Summary . . . . .	109
Method Summary . . . . .	112
Sample Summary . . . . .	113
Chain of Custody . . . . .	114
Receipt Checklists . . . . .	120

# Definitions/Glossary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Qualifiers

### GC/MS VOA

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

### GC/MS VOA TICs

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

### 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.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

### HPLC/IC

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

### General Chemistry

Qualifier	Qualifier Description
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)

## Definitions/Glossary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

### Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

# Case Narrative

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

Job ID: 380-174497-1

**Job ID: 380-174497-1**

**Eurofins Eaton Analytical Pomona**

## Job Narrative 380-174497-1

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 10/2/2025 10:06 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.8°C, 3.2°C, 4.8°C and 5.6°C.

### GC/MS VOA

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

### GC/MS Semi VOA

Method 625.1: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-636448.

Method 625.1\_SIM: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 570-636448 and analytical batch 570-639157 recovered outside control limits for the following analyte(s): 4-Chloroaniline, Aniline and Benzidine. 4-Chloroaniline, Aniline and Benzidine have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Method 625.1\_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-636448 and analytical batch 570-639157 recovered outside control limits for multiple compounds.

Method 625.1 SIM: The laboratory control sample duplicate (LCSD) for preparation batch 570-636448 and analytical batch 570-639157 recovered outside control limits for multiple compounds and surrogates. HT expired, therefore no re-extraction. The data has been reported per PM/Client request.

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

### Gasoline Range Organics

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

### Diesel Range Organics

Method 8015B\_DRO\_LL\_CS: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-636670. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

### GC Semi VOA

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

### Hydrocarbons

Method 8015B\_DAI: The continuing calibration verification (CCV) associated with 570-637626 recovered high and outside the control limits for Ethanol and Hexafluoro-2-propanol (Surr) on one column. Results are confirmed on both columns and reported from the passing column.

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

### Pesticides/PCBs

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# Case Narrative

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

Job ID: 380-174497-1

## Job ID: 380-174497-1 (Continued)

## Eurofins Eaton Analytical Pomona

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

### HPLC/IC

Method 300\_OF\_48H\_PREC: The following samples were diluted for Nitrite as N to prevent detector saturation due to high conductivity: MOANALUA WELLS (331-223-TP202) (380-174497-1) and HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065) (380-174497-2). 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 200.8: The continuing calibration blank (CCB) for analytical batch 380-177970 contained Selenium 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 for analytical batch 380-177858 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

# Detection Summary

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-174497-1**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Trihalomethanes, Total	0.61		0.50	ug/L	1		524.2	Total/NA
Bromoform	0.61		0.50	ug/L	1		524.2	Total/NA
Dieldrin	0.022		0.0096	ug/L	1		525.2	Total/NA
Bromide	230		5.0	ug/L	1		300.0	Total/NA
Chloride	99		2.5	mg/L	5		300.0	Total/NA
Nitrate as N	0.57		0.25	mg/L	5		300.0	Total/NA
Sulfate	15		1.3	mg/L	5		300.0	Total/NA
Calcium	19		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	18		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	2.4		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	43		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	2.3		0.90	ug/L	1		200.8	Total/NA
Copper	9.7		1.0	ug/L	1		200.8	Total/NA
Selenium	3.2 ^2		2.0	ug/L	1		200.8	Total/NA
Alkalinity	61		4.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	61		4.0	mg/L	1		SM 2320B	Total/NA
Specific Conductance	470		2.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	290		20	mg/L	1		SM 2540C	Total/NA
pH	8.0	HF		SU	1		SM 4500 H+ B	Total/NA

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**  
**(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**PWSID Number: HI0000331**

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.035		0.0096	ug/L	1		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.011		0.0096	ug/L	1		525.2	Total/NA
Chlordane (n.o.s.)	0.28		0.10	ug/L	1		505	Total/NA
Bromide	700		25	ug/L	5		300.0	Total/NA
Chloride	200		2.5	mg/L	5		300.0	Total/NA
Nitrate as N	1.5		0.10	mg/L	2		300.0	Total/NA
Sulfate	45		0.50	mg/L	2		300.0	Total/NA
Calcium	34		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Magnesium	32		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Potassium	3.9		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Sodium	74		0.10	mg/L	1		200.7 Rev 4.4	Total/NA
Chromium	2.4		0.90	ug/L	1		200.8	Total/NA
Selenium	3.1 ^2		2.0	ug/L	1		200.8	Total/NA
Zinc	19		5.0	ug/L	1		200.8	Total/NA
Alkalinity	64		4.0	mg/L	1		SM 2320B	Total/NA
Bicarbonate Alkalinity as CaCO3	64		4.0	mg/L	1		SM 2320B	Total/NA
Specific Conductance	830		2.0	umhos/cm	1		SM 2510B	Total/NA
Total Dissolved Solids	570		20	mg/L	1		SM 2540C	Total/NA
Fluoride	0.055		0.050	mg/L	1		SM 4500 F C	Total/NA
pH	7.8	HF		SU	1		SM 4500 H+ B	Total/NA

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

No Detections.

This Detection Summary does not include radiochemical test results.

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# Detection Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2  
(331-206-TP065)**

**Lab Sample ID: 380-174497-4**

No Detections.

- 1
- 2
- 3
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- 15
- 16

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

**Method: EPA-DW 524.2 - Total Trihalomethanes**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	0.61		0.50	ug/L			10/03/25 13:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			10/03/25 13:42	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 13:42	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 13:42	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 13:42	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 13:42	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 13:42	1
Acetone	<500		500	ug/L			10/03/25 13:42	1
Benzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 13:42	1
<b>Bromoform</b>	<b>0.61</b>		0.50	ug/L			10/03/25 13:42	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 13:42	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 13:42	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 13:42	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 13:42	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 13:42	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 13:42	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 13:42	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/06/25 20:38	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 13:42	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 13:42	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/06/25 20:38	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
m,p-Xylenes	<0.50	^3+	0.50	ug/L			10/03/25 13:42	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 13:42	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

**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			10/03/25 13:42	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 13:42	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 13:42	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 13:42	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 13:42	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 13:42	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 13:42	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 13:42	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Styrene	<0.50		0.50	ug/L			10/03/25 13:42	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 13:42	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 13:42	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 13:42	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 13:42	1
Toluene	<0.50		0.50	ug/L			10/03/25 13:42	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 13:42	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 13:42	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 13:42	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/06/25 20:38	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/06/25 20:38	1
Vinyl Chloride (VC)	<0.30	^3+	0.30	ug/L			10/03/25 13:42	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 13:42	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/03/25 13:42	1
Tentatively Identified Compound	None		ug/L			N/A		10/06/25 20:38	1
Tentatively Identified Compound	None		ug/L			N/A		10/08/25 06:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		10/03/25 13:42	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		10/06/25 20:38	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		10/08/25 06:09	1
4-Bromofluorobenzene (Surr)	103		70 - 130		10/03/25 13:42	1
4-Bromofluorobenzene (Surr)	104		70 - 130		10/06/25 20:38	1
4-Bromofluorobenzene (Surr)	106		70 - 130		10/08/25 06:09	1
Toluene-d8 (Surr)	97		70 - 130		10/03/25 13:42	1
Toluene-d8 (Surr)	97		70 - 130		10/06/25 20:38	1
Toluene-d8 (Surr)	97		70 - 130		10/08/25 06:09	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		10/03/25 13:42	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130		10/06/25 20:38	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		10/08/25 06:09	1
4-Bromofluorobenzene (Surr)	103		70 - 130		10/03/25 13:42	1
4-Bromofluorobenzene (Surr)	104		70 - 130		10/06/25 20:38	1
4-Bromofluorobenzene (Surr)	106		70 - 130		10/08/25 06:09	1
Toluene-d8 (Surr)	97		70 - 130		10/03/25 13:42	1
Toluene-d8 (Surr)	97		70 - 130		10/06/25 20:38	1
Toluene-d8 (Surr)	97		70 - 130		10/08/25 06:09	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
2,4'-DDE	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
2,4'-DDT	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
4,4'-DDD	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
4,4'-DDE	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
4,4'-DDT	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Acenaphthene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Acenaphthylene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Acetochlor	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Alachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
alpha-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
alpha-Chlordane	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Anthracene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:15	1
Atrazine	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:15	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:15	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:15	1
beta-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/03/25 09:45	10/06/25 14:15	1
Aldrin	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Bromacil	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Butachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:15	1
Chlorobenzilate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Chloroneb	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Chlorpyrifos	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Chrysene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:15	1
delta-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/03/25 09:45	10/06/25 14:15	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
<b>Dieldrin</b>	<b>0.022</b>		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Diethylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:15	1
Dimethylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:15	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		10/03/25 09:45	10/06/25 14:15	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Endosulfan sulfate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Endrin	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Endrin aldehyde	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
EPTC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Fluoranthene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Fluorene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-BHC (Lindane)	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
gamma-Chlordane	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Heptachlor	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Isophorone	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Malathion	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Methoxychlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Metolachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Molinate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Naphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Parathion	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Phenanthrene	<0.039		0.039	ug/L		10/03/25 09:45	10/06/25 14:15	1
Propachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Pyrene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Simazine	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Terbacil	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Terbutylazine	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Thiobencarb	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/03/25 09:45	10/06/25 14:15	1
trans-Nonachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:15	1
Trifluralin	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
1-Methylnaphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1
2-Methylnaphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:15	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/03/25 09:45	10/06/25 14:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	10/03/25 09:45	10/06/25 14:15	1
Perylene-d12	91		70 - 130	10/03/25 09:45	10/06/25 14:15	1
Triphenylphosphate	100		70 - 130	10/03/25 09:45	10/06/25 14:15	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	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
2,4,5-Trichlorophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
2,4,6-Trichlorophenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
2,4-Dichlorophenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
2,4-Dinitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
2,6-Dichlorophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Chloronaphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Chlorophenol	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Methylnaphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Methylphenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
2-Nitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
3/4-Methylphenol	<1.9	*- *1	1.9	ug/L		10/07/25 05:00	10/12/25 10:02	1
3-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
4,6-Dinitro-2-methylphenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Bromophenyl phenyl ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Chloro-3-methylphenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Chloroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Chlorophenyl phenyl ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
4-Nitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
Acenaphthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Acenaphthylene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Aniline	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Anthracene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzidine	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzo[a]anthracene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzo[a]pyrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzo[b]fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzo[g,h,i]perylene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzo[k]fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzoic acid	<9.6	*- *1	9.6	ug/L		10/07/25 05:00	10/12/25 10:02	1
Benzyl alcohol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
Bis(2-chloroethoxy)methane	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Bis(2-chloroethyl)ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
bis (2-Chloroisopropyl) ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Chrysene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Dibenz(a,h)anthracene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Dibenzofuran	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Fluorene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Hexachloroethane	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Indeno[1,2,3-cd]pyrene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Naphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Nitrobenzene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
N-Nitrosodi-n-propylamine	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
N-Nitrosodiphenylamine	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Pentachlorophenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
Phenanthrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1
Phenol	<0.96	*- *1	0.96	ug/L		10/07/25 05:00	10/12/25 10:02	1
Pyrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		28 - 127	10/07/25 05:00	10/12/25 10:02	1
2-Fluorobiphenyl (Surr)	90		31 - 120	10/07/25 05:00	10/12/25 10:02	1
2-Fluorophenol (Surr)	55		17 - 120	10/07/25 05:00	10/12/25 10:02	1
Nitrobenzene-d5 (Surr)	96		27 - 120	10/07/25 05:00	10/12/25 10:02	1
Phenol-d6 (Surr)	36		10 - 120	10/07/25 05:00	10/12/25 10:02	1
p-Terphenyl-d14 (Surr)	92		45 - 120	10/07/25 05:00	10/12/25 10:02	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/07/25 05:00	10/20/25 09:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	98		33 - 139				10/07/25 05:00	10/20/25 09:37	1
2-Fluorobiphenyl (Surr)	98		33 - 126				10/07/25 05:00	10/20/25 09:37	1
2-Fluorophenol (Surr)	62		12 - 120				10/07/25 05:00	10/20/25 09:37	1
Nitrobenzene-d5 (Surr)	99		36 - 120				10/07/25 05:00	10/20/25 09:37	1
Phenol-d6 (Surr)	37		10 - 120				10/07/25 05:00	10/20/25 09:37	1
p-Terphenyl-d14 (Surr)	101		47 - 131				10/07/25 05:00	10/20/25 09:37	1

## Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
GRO (C6-C10)	<10		10	ug/L			10/07/25 14:49	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134				10/07/25 14:49	1	

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
1,2,3-Trichloropropane	<0.020		0.020	ug/L		10/03/25 15:21	10/04/25 02:37	1	
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099	ug/L		10/03/25 15:21	10/04/25 02:37	1	
1,2-Dibromoethane	<0.0099		0.0099	ug/L		10/03/25 15:21	10/04/25 02:37	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	96		60 - 140				10/03/25 15:21	10/04/25 02:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Toxaphene	<0.50		0.50	ug/L		10/06/25 12:58	10/07/25 02:37	1	
Chlordane (n.o.s.)	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1016	<0.071		0.071	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1221	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1232	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1242	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1248	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1254	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
PCB-1260	<0.071		0.071	ug/L		10/06/25 12:58	10/07/25 02:37	1	
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:37	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		70 - 130				10/06/25 12:58	10/07/25 02:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics (C10-C24)	<26		26	ug/L		10/07/25 09:55	10/13/25 04:26	1	
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		10/07/25 09:55	10/13/25 04:26	1	
C8-C18	<26		26	ug/L		10/07/25 09:55	10/13/25 04:26	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	102		60 - 130				10/07/25 09:55	10/13/25 04:26	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

PWSID Number: HI0000331

**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			10/09/25 16:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	93	p	54 - 120				10/09/25 16:38	1

**Method: EPA 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	230		5.0	ug/L			10/04/25 04:15	1
Chloride	99		2.5	mg/L			10/03/25 04:04	5
Nitrate as N	0.57		0.25	mg/L			10/03/25 04:04	5
Nitrite as N	<0.25		0.25	mg/L			10/03/25 04:04	5
Sulfate	15		1.3	mg/L			10/03/25 04:04	5

**Method: EPA 200.7 Rev 4.4 - Metals (ICP)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	19		0.10	mg/L			10/03/25 16:10	1
Magnesium	18		0.10	mg/L			10/03/25 16:10	1
Potassium	2.4		0.10	mg/L			10/03/25 16:10	1
Sodium	43		0.10	mg/L			10/03/25 16:10	1

**Method: EPA 200.8 - Mercury (ICP/MS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ug/L			10/06/25 14:49	1

**Method: EPA 200.8 - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	ug/L			10/03/25 14:01	1
Arsenic	<1.0		1.0	ug/L			10/03/25 14:01	1
Beryllium	<0.30		0.30	ug/L			10/03/25 14:01	1
Cadmium	<0.50		0.50	ug/L			10/03/25 14:01	1
Chromium	2.3		0.90	ug/L			10/03/25 14:01	1
Copper	9.7		1.0	ug/L			10/03/25 14:01	1
Lead	<0.50		0.50	ug/L			10/03/25 14:01	1
Nickel	<1.0		1.0	ug/L			10/03/25 14:01	1
Selenium	3.2	^2	2.0	ug/L			10/03/25 14:01	1
Silver	<0.50		0.50	ug/L			10/03/25 14:01	1
Thallium	<0.30		0.30	ug/L			10/03/25 14:01	1
Zinc	<5.0		5.0	ug/L			10/03/25 14:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	61		4.0	mg/L			10/03/25 17:42	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	61		4.0	mg/L			10/03/25 17:42	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.0		4.0	mg/L			10/03/25 17:42	1
Specific Conductance (SM 2510B)	470		2.0	umhos/cm			10/03/25 17:42	1
Total Dissolved Solids (SM 2540C)	290		20	mg/L			10/03/25 12:58	1
Fluoride (SM 4500 F C)	<0.050		0.050	mg/L			10/03/25 20:00	1
pH (SM 4500 H+ B)	8.0	HF		SU			10/03/25 17:42	1
Sulfide (SM 4500 S2 D)	<0.050		0.050	mg/L			10/03/25 15:33	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10**

**Matrix: Drinking Water**

**Date Received: 10/02/25 10:06**

**PWSID Number: HI0000331**

**Method: EPA-DW 524.2 - Total Trihalomethanes**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50	ug/L			10/03/25 14:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			10/03/25 14:04	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:04	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 14:04	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:04	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 14:04	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 14:04	1
Acetone	<500		500	ug/L			10/03/25 14:04	1
Benzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromoform	<0.50		0.50	ug/L			10/03/25 14:04	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 14:04	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 14:04	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 14:04	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 14:04	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 14:04	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:04	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:04	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/08/25 05:46	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 14:04	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 14:04	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/08/25 05:46	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06**

**Matrix: Drinking Water  
PWSID Number: HI0000331**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	<0.50	^3+	0.50	ug/L			10/03/25 14:04	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 14:04	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/03/25 14:04	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 14:04	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 14:04	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 14:04	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 14:04	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 14:04	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 14:04	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 14:04	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Styrene	<0.50		0.50	ug/L			10/03/25 14:04	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 14:04	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 14:04	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:04	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 14:04	1
Toluene	<0.50		0.50	ug/L			10/03/25 14:04	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:04	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:04	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 14:04	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/08/25 05:46	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/08/25 05:46	1
Vinyl Chloride (VC)	<0.30	^3+	0.30	ug/L			10/03/25 14:04	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 14:04	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/03/25 14:04	1
Tentatively Identified Compound	None		ug/L			N/A		10/08/25 05:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		10/03/25 14:04	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		10/08/25 05:46	1
4-Bromofluorobenzene (Surr)	103		70 - 130		10/03/25 14:04	1
4-Bromofluorobenzene (Surr)	108		70 - 130		10/08/25 05:46	1
Toluene-d8 (Surr)	97		70 - 130		10/03/25 14:04	1
Toluene-d8 (Surr)	97		70 - 130		10/08/25 05:46	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		10/03/25 14:04	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		10/08/25 05:46	1
4-Bromofluorobenzene (Surr)	103		70 - 130		10/03/25 14:04	1
4-Bromofluorobenzene (Surr)	108		70 - 130		10/08/25 05:46	1
Toluene-d8 (Surr)	97		70 - 130		10/03/25 14:04	1
Toluene-d8 (Surr)	97		70 - 130		10/08/25 05:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
2,4'-DDE	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06**

**Matrix: Drinking Water  
PWSID Number: HI0000331**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDT	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
4,4'-DDD	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
4,4'-DDE	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
4,4'-DDT	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Acenaphthene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Acenaphthylene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Acetochlor	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Alachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
alpha-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
alpha-Chlordane	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Anthracene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:35	1
Atrazine	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Benz(a)anthracene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Benzo[a]pyrene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:35	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:35	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:35	1
beta-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		10/03/25 09:45	10/06/25 14:35	1
Aldrin	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Bromacil	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Butachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Butylbenzylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:35	1
Chlorobenzilate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Chloroneb	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Chlorpyrifos	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Chrysene	<0.019		0.019	ug/L		10/03/25 09:45	10/06/25 14:35	1
delta-BHC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		10/03/25 09:45	10/06/25 14:35	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
<b>Dieldrin</b>	<b>0.035</b>		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Diethylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:35	1
Dimethylphthalate	<0.48		0.48	ug/L		10/03/25 09:45	10/06/25 14:35	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		10/03/25 09:45	10/06/25 14:35	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Endosulfan sulfate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Endrin	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Endrin aldehyde	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
EPTC	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Fluoranthene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Fluorene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
gamma-BHC (Lindane)	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06

Matrix: Drinking Water  
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
gamma-Chlordane	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Heptachlor	<0.0096		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1
<b>Heptachlor epoxide (isomer B)</b>	<b>0.011</b>		0.0096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Hexachlorobenzene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Isophorone	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Malathion	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Methoxychlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Metolachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Molinate	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Naphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Parathion	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Phenanthrene	<0.039		0.039	ug/L		10/03/25 09:45	10/06/25 14:35	1
Propachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Pyrene	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Simazine	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Terbacil	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Terbutylazine	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Thiobencarb	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		10/03/25 09:45	10/06/25 14:35	1
trans-Nonachlor	<0.048		0.048	ug/L		10/03/25 09:45	10/06/25 14:35	1
Trifluralin	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
1-Methylnaphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1
2-Methylnaphthalene	<0.096		0.096	ug/L		10/03/25 09:45	10/06/25 14:35	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/03/25 09:45	10/06/25 14:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	10/03/25 09:45	10/06/25 14:35	1
Perylene-d12	92		70 - 130	10/03/25 09:45	10/06/25 14:35	1
Triphenylphosphate	101		70 - 130	10/03/25 09:45	10/06/25 14:35	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	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
2,4,5-Trichlorophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
2,4,6-Trichlorophenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
2,4-Dichlorophenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
2,4-Dinitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
2,6-Dichlorophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Chloronaphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Chlorophenol	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Methylnaphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Methylphenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
2-Nitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06**

**Matrix: Drinking Water  
PWSID Number: HI0000331**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
3/4-Methylphenol	<1.9	*- *1	1.9	ug/L		10/07/25 05:00	10/12/25 10:23	1
3-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
4,6-Dinitro-2-methylphenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Bromophenyl phenyl ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Chloro-3-methylphenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Chloroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Chlorophenyl phenyl ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Nitroaniline	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
4-Nitrophenol	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
Acenaphthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Acenaphthylene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Aniline	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Anthracene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzidine	<4.8	*- *1	4.8	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzo[a]anthracene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzo[a]pyrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzo[b]fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzo[g,h,i]perylene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzo[k]fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzoic acid	<9.7	*- *1	9.7	ug/L		10/07/25 05:00	10/12/25 10:23	1
Benzyl alcohol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
Bis(2-chloroethoxy)methane	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Bis(2-chloroethyl)ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
bis (2-Chloroisopropyl) ether	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Chrysene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Dibenz(a,h)anthracene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Dibenzofuran	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Fluoranthene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Fluorene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Hexachloroethane	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Indeno[1,2,3-cd]pyrene	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Naphthalene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Nitrobenzene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
N-Nitrosodi-n-propylamine	<0.19	*1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
N-Nitrosodiphenylamine	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Pentachlorophenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
Phenanthrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1
Phenol	<0.97	*- *1	0.97	ug/L		10/07/25 05:00	10/12/25 10:23	1
Pyrene	<0.19	*- *1	0.19	ug/L		10/07/25 05:00	10/12/25 10:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		28 - 127	10/07/25 05:00	10/12/25 10:23	1
2-Fluorobiphenyl (Surr)	80		31 - 120	10/07/25 05:00	10/12/25 10:23	1
2-Fluorophenol (Surr)	50		17 - 120	10/07/25 05:00	10/12/25 10:23	1
Nitrobenzene-d5 (Surr)	85		27 - 120	10/07/25 05:00	10/12/25 10:23	1
Phenol-d6 (Surr)	32		10 - 120	10/07/25 05:00	10/12/25 10:23	1
p-Terphenyl-d14 (Surr)	95		45 - 120	10/07/25 05:00	10/12/25 10:23	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06

Matrix: Drinking Water  
PWSID Number: HI0000331

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	10/07/25 05:00	10/20/25 10:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	81		33 - 139				10/07/25 05:00	10/20/25 10:01	1
2-Fluorobiphenyl (Surr)	84		33 - 126				10/07/25 05:00	10/20/25 10:01	1
2-Fluorophenol (Surr)	51		12 - 120				10/07/25 05:00	10/20/25 10:01	1
Nitrobenzene-d5 (Surr)	86		36 - 120				10/07/25 05:00	10/20/25 10:01	1
Phenol-d6 (Surr)	31		10 - 120				10/07/25 05:00	10/20/25 10:01	1
p-Terphenyl-d14 (Surr)	100		47 - 131				10/07/25 05:00	10/20/25 10:01	1

## Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
GRO (C6-C10)	<10		10	ug/L			10/07/25 15:09	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134				10/07/25 15:09	1	

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
1,2,3-Trichloropropane	<0.020		0.020	ug/L		10/03/25 15:21	10/04/25 03:00	1	
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		10/03/25 15:21	10/04/25 03:00	1	
1,2-Dibromoethane	<0.010		0.010	ug/L		10/03/25 15:21	10/04/25 03:00	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	94		60 - 140				10/03/25 15:21	10/04/25 03:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Toxaphene	<0.50		0.50	ug/L		10/06/25 12:58	10/07/25 02:59	1	
Chlordane (n.o.s.)	0.28		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1016	<0.070		0.070	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1221	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1232	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1242	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1248	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1254	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
PCB-1260	<0.070		0.070	ug/L		10/06/25 12:58	10/07/25 02:59	1	
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 02:59	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		70 - 130				10/06/25 12:58	10/07/25 02:59	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		10/07/25 09:55	10/13/25 04:47	1	
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		10/07/25 09:55	10/13/25 04:47	1	
C8-C18	<26		26	ug/L		10/07/25 09:55	10/13/25 04:47	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	102		60 - 130				10/07/25 09:55	10/13/25 04:47	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06

Matrix: Drinking Water  
PWSID Number: HI0000331

**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			10/09/25 16:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	93		54 - 120				10/09/25 16:59	1

**Method: EPA 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	700		25	ug/L			10/04/25 04:41	5
Chloride	200		2.5	mg/L			10/03/25 14:43	5
Nitrate as N	1.5		0.10	mg/L			10/03/25 03:00	2
Nitrite as N	<0.10		0.10	mg/L			10/03/25 03:00	2
Sulfate	45		0.50	mg/L			10/03/25 03:00	2

**Method: EPA 200.7 Rev 4.4 - Metals (ICP)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	34		0.10	mg/L			10/03/25 16:12	1
Magnesium	32		0.10	mg/L			10/03/25 16:12	1
Potassium	3.9		0.10	mg/L			10/03/25 16:12	1
Sodium	74		0.10	mg/L			10/03/25 16:12	1

**Method: EPA 200.8 - Mercury (ICP/MS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.20		0.20	ug/L			10/06/25 14:52	1

**Method: EPA 200.8 - Metals (ICP/MS)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	ug/L			10/03/25 14:07	1
Arsenic	<1.0		1.0	ug/L			10/03/25 14:07	1
Beryllium	<0.30		0.30	ug/L			10/03/25 14:07	1
Cadmium	<0.50		0.50	ug/L			10/03/25 14:07	1
Chromium	2.4		0.90	ug/L			10/03/25 14:07	1
Copper	<1.0		1.0	ug/L			10/03/25 14:07	1
Lead	<0.50		0.50	ug/L			10/03/25 14:07	1
Nickel	<1.0		1.0	ug/L			10/03/25 14:07	1
Selenium	3.1	^2	2.0	ug/L			10/03/25 14:07	1
Silver	<0.50		0.50	ug/L			10/03/25 14:07	1
Thallium	<0.30		0.30	ug/L			10/03/25 14:07	1
Zinc	19		5.0	ug/L			10/03/25 14:07	1

**General Chemistry**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity (SM 2320B)	64		4.0	mg/L			10/03/25 18:26	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	64		4.0	mg/L			10/03/25 18:26	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	<4.0		4.0	mg/L			10/03/25 18:26	1
Specific Conductance (SM 2510B)	830		2.0	umhos/cm			10/03/25 18:26	1
Total Dissolved Solids (SM 2540C)	570		20	mg/L			10/03/25 12:58	1
Fluoride (SM 4500 F C)	0.055		0.050	mg/L			10/03/25 20:14	1
pH (SM 4500 H+ B)	7.8	HF		SU			10/03/25 18:26	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

Date Collected: 10/01/25 10:10  
Date Received: 10/02/25 10:06

Matrix: Drinking Water  
PWSID Number: HI0000331

**General Chemistry (Continued)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide (SM 4500 S2 D)	<0.050	F1	0.050	mg/L			10/03/25 15:33	1

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

Date Collected: 10/01/25 09:28  
Date Received: 10/02/25 10:06

Matrix: Water

**Method: EPA-DW 524.2 - Total Trihalomethanes**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50	ug/L			10/03/25 14:27	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:27	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:27	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 14:27	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 14:27	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 14:27	1
Acetone	<500		500	ug/L			10/03/25 14:27	1
Benzene	<0.50		0.50	ug/L			10/03/25 14:27	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Bromoform	<0.50		0.50	ug/L			10/03/25 14:27	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 14:27	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 14:27	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 14:27	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 14:27	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 14:27	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:27	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:27	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/06/25 20:16	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

**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			10/06/25 20:16	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
m,p-Xylenes	<0.50	^3+	0.50	ug/L			10/03/25 14:27	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 14:27	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/03/25 14:27	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 14:27	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 14:27	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 14:27	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 14:27	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 14:27	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 14:27	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 14:27	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
Styrene	<0.50		0.50	ug/L			10/03/25 14:27	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 14:27	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 14:27	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 14:27	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 14:27	1
Toluene	<0.50		0.50	ug/L			10/03/25 14:27	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 14:27	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 14:27	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 14:27	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 14:27	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 14:27	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/06/25 20:16	1
Vinyl Chloride (VC)	<0.30	^3+	0.30	ug/L			10/03/25 14:27	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/06/25 20:16	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 14:27	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 14:27	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 14:27	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	31	T J	ug/L		1.19	N/A		10/03/25 14:27	1
Acetaldehyde	10	T J N	ug/L		1.64	75-07-0		10/03/25 14:27	1
Acetaldehyde	12	T J N	ug/L		1.64	75-07-0		10/06/25 20:16	1
Furfural	20	T J N	ug/L		10.10	98-01-1		10/03/25 14:27	1
Furfural	30	T J N	ug/L		10.10	98-01-1		10/06/25 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		10/03/25 14:27	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130		10/06/25 20:16	1
4-Bromofluorobenzene (Surr)	101		70 - 130		10/03/25 14:27	1
4-Bromofluorobenzene (Surr)	104		70 - 130		10/06/25 20:16	1
Toluene-d8 (Surr)	97		70 - 130		10/03/25 14:27	1
Toluene-d8 (Surr)	97		70 - 130		10/06/25 20:16	1

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

Date Collected: 10/01/25 09:28

Matrix: Water

Date Received: 10/02/25 10:06

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (GC)**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			10/07/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134				10/07/25 19:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.020		0.020	ug/L		10/03/25 15:21	10/04/25 03:23	1
1,2-Dibromo-3-Chloropropane	<0.010		0.010	ug/L		10/03/25 15:21	10/04/25 03:23	1
1,2-Dibromoethane	<0.010		0.010	ug/L		10/03/25 15:21	10/04/25 03:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (Surr)	96		60 - 140			10/03/25 15:21	10/04/25 03:23	1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)**

**Lab Sample ID: 380-174497-4**

Date Collected: 10/01/25 10:10

Matrix: Water

Date Received: 10/02/25 10:06

**Method: EPA-DW 524.2 - Total Trihalomethanes**

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Trihalomethanes, Total	<0.50		0.50	ug/L			10/03/25 18:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1-Dichlorethylene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 18:06	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 18:06	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 18:06	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 18:06	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 18:06	1
Acetone	<500	^3+	500	ug/L			10/03/25 18:06	1
Benzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromoform	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 18:06	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 18:06	1

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# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2  
(331-206-TP065)**

**Lab Sample ID: 380-174497-4**

**Date Collected: 10/01/25 10:10**

**Matrix: Water**

**Date Received: 10/02/25 10:06**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 18:06	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 18:06	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 18:06	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 18:06	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 18:06	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/03/25 18:06	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
m,p-Xylenes	<0.50		0.50	ug/L			10/03/25 18:06	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 18:06	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/03/25 18:06	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 18:06	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 18:06	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 18:06	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 18:06	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 18:06	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 18:06	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 18:06	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Styrene	<0.50		0.50	ug/L			10/03/25 18:06	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 18:06	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 18:06	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 18:06	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 18:06	1
Toluene	<0.50		0.50	ug/L			10/03/25 18:06	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 18:06	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 18:06	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 18:06	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 18:06	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 18:06	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/03/25 18:06	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/03/25 18:06	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 18:06	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 18:06	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 18:06	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	3.1	T J	ug/L		9.02	N/A		10/03/25 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/03/25 18:06	1

Eurofins Eaton Analytical Pomona

# Client Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2  
(331-206-TP065)**

**Lab Sample ID: 380-174497-4**

Date Collected: 10/01/25 10:10

Matrix: Water

Date Received: 10/02/25 10:06

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

<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)	97		70 - 130			10/03/25 18:06	1
Toluene-d8 (Surr)	101		70 - 130			10/03/25 18:06	1

**Method: SW846 8015B GRO LL - Gasoline Range Organics - (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>
GRO (C6-C10)	<10		10	ug/L			10/07/25 19:46	1

<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)	93		38 - 134			10/07/25 19:46	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		10/03/25 15:21	10/04/25 03:46	1
1,2-Dibromo-3-Chloropropane	<0.0099		0.0099	ug/L		10/03/25 15:21	10/04/25 03:46	1
1,2-Dibromoethane	<0.0099		0.0099	ug/L		10/03/25 15:21	10/04/25 03:46	1

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>		<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>	
1,2-Dibromopropane (Surr)	96		60 - 140			10/03/25 15:21	10/04/25 03:46	1

# Action Limit Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

**PWSID Number: HI0000331**

## 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	0.61		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	0.61		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	^3+	ug/L	2.000	2		524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000		524.2	Total/NA
Alachlor	<0.048		ug/L		2		525.2	Total/NA
Atrazine	<0.048		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L		400		525.2	Total/NA
Endrin	<0.0096		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.0096		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.0096		ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0096		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L		50		525.2	Total/NA
Methoxychlor	<0.048		ug/L		40		525.2	Total/NA
Simazine	<0.048		ug/L		4		525.2	Total/NA
Benzo[a]pyrene	<0.19	*- *1	ug/L		0.2		625.1 SIM	Total/NA
Pentachlorophenol	<0.96	*- *1	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	<0.0099		ug/L		0.2		504.1	Total/NA
1,2-Dibromoethane	<0.0099		ug/L		0.05		504.1	Total/NA
Toxaphene	<0.50		ug/L		3		505	Total/NA
Chlordane (n.o.s.)	<0.10		ug/L		2		505	Total/NA

# Action Limit Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

(Continued)

PWSID Number: HI0000331

## 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
Polychlorinated biphenyls, Total	<0.10		ug/L		0.5		505	Total/NA
Chloride	99		mg/L			250	300.0	Total/NA
Nitrate as N	0.57		mg/L		10		300.0	Total/NA
Nitrite as N	<0.25		mg/L		1		300.0	Total/NA
Sulfate	15		mg/L			250	300.0	Total/NA
Mercury	<0.20		ug/L		2		200.8	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	2.3		ug/L		100		200.8	Total/NA
Copper	9.7		ug/L		1300	1000	200.8	Total/NA
Lead	<0.50		ug/L		10.00		200.8	Total/NA
Selenium	3.2 ^2		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	290		mg/L			500	SM 2540C	Total/NA
Fluoride	<0.050		mg/L		4	2	SM 4500 F C	Total/NA
pH	8.0	HF	SU			6.5	SM 4500 H+ B	Total/NA

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**

**Lab Sample ID: 380-174497-2**

(331-206-TP065)

PWSID Number: HI0000331

## 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
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

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# Action Limit Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**  
**(331-206-TP065) (Continued)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-174497-2**

## Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits have been highlighted for your convenience.

Analyte	Result	Qualifier	Unit	HI Org	EPAMCL	EPAMCL	Method	Prep Type
				Limit	Limit	S Limit		
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	^3+	ug/L	2.000	2		524.2	Total/NA
Xylenes, Total	<0.50		ug/L	10000	10000		524.2	Total/NA
Alachlor	<0.048		ug/L		2		525.2	Total/NA
Atrazine	<0.048		ug/L		3		525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L		0.2		525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L		6		525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L		400		525.2	Total/NA
Endrin	<0.0096		ug/L		2		525.2	Total/NA
gamma-BHC (Lindane)	<0.0096		ug/L		0.2		525.2	Total/NA
Heptachlor	<0.0096		ug/L		0.4		525.2	Total/NA
Heptachlor epoxide (isomer B)	0.011		ug/L		0.2		525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L		1		525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L		50		525.2	Total/NA
Methoxychlor	<0.048		ug/L		40		525.2	Total/NA
Simazine	<0.048		ug/L		4		525.2	Total/NA
Benzo[a]pyrene	<0.19	*- *1	ug/L		0.2		625.1 SIM	Total/NA
Pentachlorophenol	<0.97	*- *1	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.)	0.28		ug/L		2		505	Total/NA
Polychlorinated biphenyls, Total	<0.10		ug/L		0.5		505	Total/NA
Chloride	200		mg/L			250	300.0	Total/NA
Nitrate as N	1.5		mg/L		10		300.0	Total/NA
Nitrite as N	<0.10		mg/L		1		300.0	Total/NA
Sulfate	45		mg/L			250	300.0	Total/NA
Mercury	<0.20		ug/L		2		200.8	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	2.4		ug/L		100		200.8	Total/NA
Copper	<1.0		ug/L		1300	1000	200.8	Total/NA
Lead	<0.50		ug/L		10.00		200.8	Total/NA

# Action Limit Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1**  
**(331-206-TP065) (Continued)**  
**PWSID Number: HI0000331**

**Lab Sample ID: 380-174497-2**

## Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits have been highlighted for your convenience.

Analyte	Result	Qualifier	Unit	HI Org	EPAMCL	EPAMCL	Method	Prep Type
				Limit	Limit	S		
Selenium	3.1	^2	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	19		ug/L			5000	200.8	Total/NA
<b>Total Dissolved Solids</b>	<b>570</b>		mg/L			<b>500</b>	SM 2540C	Total/NA
Fluoride	0.055		mg/L		4	2	SM 4500 F C	Total/NA
pH	7.8	HF	SU			6.5	SM 4500 H+ B	Total/NA

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

## 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	EPAMCL	RL	Method	Prep Type
				Limit	Limit			
Trihalomethanes, Total	<0.50		ug/L		80	0.50	524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200	0.50	524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,1-Dichloroethylene	<0.50		ug/L	7.000	7	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000		0.50	524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50		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
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	^3+	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

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# Action Limit Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2  
(331-206-TP065)**

**Lab Sample ID: 380-174497-4**

## 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
Trihalomethanes, Total	<0.50		ug/L		80	0.50	524.2	Total/NA
1,1,1-Trichloroethane	<0.50		ug/L	200.0	200	0.50	524.2	Total/NA
1,1,2-Trichloroethane	<0.50		ug/L	5.000	5	0.50	524.2	Total/NA
1,1-Dichloroethylene	<0.50		ug/L	7.000	7	0.50	524.2	Total/NA
1,2,3-Trichloropropane	<0.50		ug/L	0.6000		0.50	524.2	Total/NA
1,2,4-Trichlorobenzene	<0.50		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
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	<0.0099		ug/L		0.2	0.0099	504.1	Total/NA
1,2-Dibromoethane	<0.0099		ug/L		0.05	0.0099	504.1	Total/NA

# Surrogate Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

Matrix: Drinking 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)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	105	105	103	103	97	97
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	106	106	108	108	97	97

**Surrogate Legend**  
DCA = 1,2-Dichloroethane-d4 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		DCA (70-130)	DCA (70-130)	BFB (70-130)	BFB (70-130)	TOL (70-130)	TOL (70-130)
380-174497-1	MOANALUA WELLS (331-223-T	104	104	103	103	97	97
380-174497-1	MOANALUA WELLS (331-223-TP202)	103	103	104	104	97	97
380-174497-1	MOANALUA WELLS (331-223-TP202)	106	106	106	106	97	97
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	105	105	101	101	97	97
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	104	104	104	104	97	97
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	94	94	97	97	101	101
LCS 380-177726/5	Lab Control Sample	92	92	99	99	100	100
LCS 380-177727/5	Lab Control Sample	101	101	98	98	100	100
LCS 380-178027/11	Lab Control Sample	101	101	100	100	102	102
LCS 380-178240/3	Lab Control Sample	104	104	103	103	103	103
LCSD 380-177726/6	Lab Control Sample Dup	90	90	100	100	98	98
LCSD 380-177727/6	Lab Control Sample Dup	104	104	100	100	101	101
LCSD 380-178027/12	Lab Control Sample Dup	101	101	102	102	100	100
LCSD 380-178240/4	Lab Control Sample Dup	103	103	103	103	102	102
MB 380-177726/8	Method Blank	91	91	96	96	98	98
MB 380-177727/8	Method Blank	106	106	103	103	97	97
MB 380-178027/15	Method Blank	102	102	100	100	98	98
MB 380-178240/5	Method Blank	105	105	107	107	99	99
MRL 380-177726/3	Lab Control Sample	92	92	95	95	100	100
MRL 380-177726/4	Lab Control Sample	90	90	95	95	101	101
MRL 380-177727/3	Lab Control Sample	104	104	99	99	100	100
MRL 380-177727/4	Lab Control Sample	103	103	103	103	99	99
MRL 380-178027/13	Lab Control Sample	100	100	99	99	99	99
MRL 380-178027/14	Lab Control Sample	101	101	101	101	100	100
MRL 380-178175/3	Lab Control Sample	104	104	103	103	99	99
MRL 380-178175/4	Lab Control Sample	105	105	106	106	102	102

**Surrogate Legend**  
DCA = 1,2-Dichloroethane-d4 (Surr)  
BFB = 4-Bromofluorobenzene (Surr)  
TOL = Toluene-d8 (Surr)

# Surrogate Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	99	92	101

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		2NMX (70-130)	PRY (70-130)	TPP (70-130)
380-174230-V-1-A MS	Matrix Spike	99	101	104
380-174329-K-2-A DU	Duplicate	102	90	105
380-174497-1	MOANALUA WELLS (331-223-TP202)	97	91	100
LCS 380-177756/22-A	Lab Control Sample	99	95	104
MB 380-177756/20-A	Method Blank	101	88	90
MRL 380-177756/21-A	Lab Control Sample	101	94	100

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	81	84	51	86	31	100

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-174497-1	MOANALUA WELLS (331-223-T	98	98	62	99	37	101
MB 570-636448/1-A	Method Blank	68	92	53	96	35	97

**Surrogate Legend**  
 TBP = 2,4,6-Tribromophenol (Surr)  
 FBP = 2-Fluorobiphenyl (Surr)

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# Surrogate Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

2FP = 2-Fluorophenol (Surr)  
 NBZ = Nitrobenzene-d5 (Surr)  
 PHL6 = Phenol-d6 (Surr)  
 TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Drinking 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)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	87	80	50	85	32	95

### Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

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)
380-174497-1	MOANALUA WELLS (331-223-T	93	90	55	96	36	92
LCS 570-636448/2-A	Lab Control Sample	93	89	66	81	44	93
LCS 570-636448/3-A	Lab Control Sample Dup	13 S1-	13 S1-	8 S1-	13 S1-	6 S1-	13 S1-
MB 570-636448/1-A	Method Blank	89	88	55	95	35	91

### Surrogate Legend

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

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	97

### Surrogate Legend

BFB = 4-Bromofluorobenzene (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)
380-173600-B-1 MS	Matrix Spike	95
380-173600-B-1 MSD	Matrix Spike Duplicate	99

# Surrogate Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-174497-1	MOANALUA WELLS (331-223-T	97
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	97
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	93
LCS 570-636604/4	Lab Control Sample	95
LCS 570-636604/5	Lab Control Sample Dup	97
MB 570-636604/6	Method Blank	94
MRL 570-636604/3	Lab Control Sample	93

#### Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBPP1 (60-140)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	94

#### Surrogate Legend

DBPP = 1,2-Dibromopropane (Surr)

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	DBPP1 (60-140)
380-173719-BJ-1-A MS	Matrix Spike	102
380-173871-BO-1-A DU	Duplicate	102
380-174497-1	MOANALUA WELLS (331-223-TP202)	96
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	96
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	96
LCS 380-177809/29-A	Lab Control Sample	100
MBL 380-177809/4-A	Method Blank	94
MRL 380-177809/2-A	Lab Control Sample	96
MRL 380-177809/3-A	Lab Control Sample	91

#### Surrogate Legend

DBPP = 1,2-Dibromopropane (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (70-130)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	92

#### Surrogate Legend

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# Surrogate Summary

Client: City & County of Honolulu  
 Project/Site: RED-HILL  
 TCX = Tetrachloro-m-xylene

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## 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)
380-174497-1	MOANALUA WELLS (331-223-T	86
380-174568-F-1-A MS	Matrix Spike	96
380-174568-G-1-A MS	Matrix Spike	105
380-174708-E-1-A MS	Matrix Spike	98
380-174708-F-1-A MS	Matrix Spike	110
LCS 380-177969/16-A	Lab Control Sample	99
LCS 380-177969/24-A	Lab Control Sample	111
LCS 380-177969/57-A	Lab Control Sample	97
LCS 380-177969/59-A	Lab Control Sample	103
LCS 380-177969/60-A	Lab Control Sample	97
LCS 380-177969/8-A	Lab Control Sample	99
LCSD 380-177969/58-A	Lab Control Sample Dup	98
MB 380-177969/32-A	Method Blank	95
MRL 380-177969/30-A	Lab Control Sample	104
MRL 380-177969/31-A	Lab Control Sample	97

**Surrogate Legend**

TCX = Tetrachloro-m-xylene

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

Matrix: Drinking Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	102

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

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

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-174497-1	MOANALUA WELLS (331-223-T	102
LCS 570-636670/2-A	Lab Control Sample	94
LCSD 570-636670/3-A	Lab Control Sample Dup	102
MB 570-636670/1-A	Method Blank	99
MRL 570-636670/4-A	Lab Control Sample	104

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# Surrogate Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Matrix: Drinking Water**

**Prep Type: Total/NA**

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	HF2PP1 (54-120)
380-174497-2	HALAWA WELLS UNITS 1 & 2 F	93

**Surrogate Legend**

HF2PP = Hexafluoro-2-propanol (Surr)

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

**Matrix: Water**

**Prep Type: Total/NA**

**Percent Surrogate Recovery (Acceptance Limits)**

Lab Sample ID	Client Sample ID	HF2PP1 (54-120)
380-174497-1	MOANALUA WELLS (331-223-T	93 p
570-249246-A-1 MS	Matrix Spike	87
570-249246-A-1 MSD	Matrix Spike Duplicate	92 p
LCS 570-637626/5	Lab Control Sample	91
LCSD 570-637626/6	Lab Control Sample Dup	83
MB 570-637626/3	Method Blank	86
MRL 570-637626/4	Lab Control Sample	102

**Surrogate Legend**

HF2PP = Hexafluoro-2-propanol (Surr)

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177726/8**  
**Matrix: Water**  
**Analysis Batch: 177726**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1-Dichlorethylene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 11:15	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 11:15	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 11:15	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 11:15	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 11:15	1
Acetone	<500		500	ug/L			10/03/25 11:15	1
Benzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromoform	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 11:15	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 11:15	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 11:15	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 11:15	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 11:15	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 11:15	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/03/25 11:15	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
m,p-Xylenes	<0.50		0.50	ug/L			10/03/25 11:15	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 11:15	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/03/25 11:15	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 11:15	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 11:15	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 11:15	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 11:15	1

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177726/8**  
**Matrix: Water**  
**Analysis Batch: 177726**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 11:15	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 11:15	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 11:15	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Styrene	<0.50		0.50	ug/L			10/03/25 11:15	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 11:15	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 11:15	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 11:15	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 11:15	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 11:15	1
Toluene	<0.50		0.50	ug/L			10/03/25 11:15	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 11:15	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 11:15	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 11:15	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/03/25 11:15	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 11:15	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/03/25 11:15	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 11:15	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/03/25 11:15	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 11:15	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/03/25 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 130		10/03/25 11:15	1
4-Bromofluorobenzene (Surr)	96		70 - 130		10/03/25 11:15	1
Toluene-d8 (Surr)	98		70 - 130		10/03/25 11:15	1

**Lab Sample ID: LCS 380-177726/5**  
**Matrix: Water**  
**Analysis Batch: 177726**

**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	4.68		ug/L		94	70 - 130
1,1,1-Trichloroethane	5.00	4.76		ug/L		95	70 - 130
1,1,1,2,2-Tetrachloroethane	5.00	4.84		ug/L		97	70 - 130
1,1,1,2-Trichloroethane	5.00	4.73		ug/L		95	70 - 130
1,1-Dichloroethane	5.00	5.09		ug/L		102	70 - 130
1,1-Dichloroethylene	5.00	4.87		ug/L		97	70 - 130
1,1-Dichloropropene	5.00	4.75		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	5.00	4.65		ug/L		93	70 - 130
1,2,3-Trichloropropane	5.00	4.78		ug/L		96	70 - 130
1,2,4-Trichlorobenzene	5.00	5.01		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	5.00	4.89		ug/L		98	70 - 130
1,2-Dichloroethane	5.00	4.63		ug/L		93	70 - 130
1,2-Dichloropropane	5.00	5.04		ug/L		101	70 - 130

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177726/5**  
**Matrix: Water**  
**Analysis Batch: 177726**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	5.00	5.05		ug/L		101	70 - 130
1,3-Dichloropropane	5.00	4.89		ug/L		98	70 - 130
2,2-Dichloropropane	5.00	5.15		ug/L		103	70 - 130
2-Butanone (MEK)	50.0	52.4		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	50.3		ug/L		101	70 - 130
Acetone	50.0	50.6	J	ug/L		101	70 - 130
Benzene	5.00	4.93		ug/L		99	70 - 130
Bromobenzene	5.00	4.79		ug/L		96	70 - 130
Bromochloromethane	5.00	4.77		ug/L		95	70 - 130
Bromodichloromethane	5.00	4.49		ug/L		90	70 - 130
Bromoform	5.00	4.90		ug/L		98	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.74		ug/L		115	70 - 130
Carbon disulfide	5.00	4.85		ug/L		97	70 - 130
Carbon tetrachloride	5.00	4.36		ug/L		87	70 - 130
Chlorobenzene	5.00	5.02		ug/L		100	70 - 130
Chlorodibromomethane	5.00	4.44		ug/L		89	70 - 130
cis-1,3-Dichloropropene	5.00	4.49		ug/L		90	70 - 130
Dichloromethane	5.00	5.08		ug/L		102	70 - 130
Ethylbenzene	5.00	4.97		ug/L		99	70 - 130
Hexachlorobutadiene	5.00	5.00		ug/L		100	70 - 130
Isopropylbenzene	5.00	4.97		ug/L		99	70 - 130
m,p-Xylenes	10.0	10.1		ug/L		101	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.76		ug/L		95	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	5.05		ug/L		101	70 - 130
Naphthalene	5.00	4.72		ug/L		94	70 - 130
n-Butylbenzene	5.00	5.04		ug/L		101	70 - 130
N-Propylbenzene	5.00	4.85		ug/L		97	70 - 130
o-Chlorotoluene	5.00	4.87		ug/L		97	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.85		ug/L		97	70 - 130
o-Xylene	5.00	5.07		ug/L		101	70 - 130
p-Chlorotoluene	5.00	4.93		ug/L		99	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.74		ug/L		95	70 - 130
p-Isopropyltoluene	5.00	4.84		ug/L		97	70 - 130
sec-Butylbenzene	5.00	4.89		ug/L		98	70 - 130
Styrene	5.00	5.17		ug/L		103	70 - 130
Tert-amyl methyl ether	5.00	5.29		ug/L		106	70 - 130
1,3-Dichloropropene, Total	10.0	9.03		ug/L		90	70 - 130
Tert-butyl ethyl ether	5.00	5.22		ug/L		104	70 - 130
tert-Butylbenzene	5.00	4.74		ug/L		95	70 - 130
Tetrachloroethene (PCE)	5.00	4.84		ug/L		97	70 - 130
Toluene	5.00	4.92		ug/L		98	70 - 130
trans-1,2-Dichloroethylene	5.00	4.95		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	4.54		ug/L		91	70 - 130
Trichloroethylene (TCE)	5.00	5.09		ug/L		102	70 - 130
Bromoethane	5.00	5.47		ug/L		109	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	5.03		ug/L		101	70 - 130
Trichlorotrifluoroethane	5.00	4.79		ug/L		96	70 - 130
Diisopropyl ether	5.00	5.20		ug/L		104	70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177726/5**  
**Matrix: Water**  
**Analysis Batch: 177726**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl Chloride (VC)	5.00	5.27		ug/L		105	70 - 130
Xylenes, Total	15.0	15.1		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 380-177726/6**  
**Matrix: Water**  
**Analysis Batch: 177726**

**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	4.69		ug/L		94	70 - 130	0	20
1,1,1-Trichloroethane	5.00	4.56		ug/L		91	70 - 130	4	20
1,1,2,2-Tetrachloroethane	5.00	5.07		ug/L		101	70 - 130	5	20
1,1,2-Trichloroethane	5.00	4.65		ug/L		93	70 - 130	2	20
1,1-Dichloroethane	5.00	4.95		ug/L		99	70 - 130	3	20
1,1-Dichlorethylene	5.00	4.69		ug/L		94	70 - 130	4	20
1,1-Dichloropropene	5.00	4.63		ug/L		93	70 - 130	3	20
1,2,3-Trichlorobenzene	5.00	4.84		ug/L		97	70 - 130	4	20
1,2,3-Trichloropropane	5.00	4.88		ug/L		98	70 - 130	2	20
1,2,4-Trichlorobenzene	5.00	4.83		ug/L		97	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.00		ug/L		100	70 - 130	2	20
1,2-Dichloroethane	5.00	4.82		ug/L		96	70 - 130	4	20
1,2-Dichloropropane	5.00	4.76		ug/L		95	70 - 130	6	20
1,3,5-Trimethylbenzene	5.00	4.98		ug/L		100	70 - 130	2	20
1,3-Dichloropropane	5.00	4.85		ug/L		97	70 - 130	1	20
2,2-Dichloropropane	5.00	4.96		ug/L		99	70 - 130	4	20
2-Butanone (MEK)	50.0	55.5		ug/L		111	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	50.0	51.1		ug/L		102	70 - 130	2	20
Acetone	50.0	51.4	J	ug/L		103	70 - 130	1	20
Benzene	5.00	4.76		ug/L		95	70 - 130	4	20
Bromobenzene	5.00	4.77		ug/L		95	70 - 130	0	20
Bromochloromethane	5.00	4.65		ug/L		93	70 - 130	3	20
Bromodichloromethane	5.00	4.39		ug/L		88	70 - 130	2	20
Bromoform	5.00	5.10		ug/L		102	70 - 130	4	20
Bromomethane (Methyl Bromide)	5.00	5.44		ug/L		109	70 - 130	5	20
Carbon disulfide	5.00	4.75		ug/L		95	70 - 130	2	20
Carbon tetrachloride	5.00	4.37		ug/L		87	70 - 130	0	20
Chlorobenzene	5.00	4.74		ug/L		95	70 - 130	6	20
Chlorodibromomethane	5.00	4.77		ug/L		95	70 - 130	7	20
cis-1,3-Dichloropropene	5.00	4.78		ug/L		96	70 - 130	6	20
Dichloromethane	5.00	5.02		ug/L		100	70 - 130	1	20
Ethylbenzene	5.00	5.01		ug/L		100	70 - 130	1	20
Hexachlorobutadiene	5.00	4.79		ug/L		96	70 - 130	4	20
Isopropylbenzene	5.00	4.97		ug/L		99	70 - 130	0	20
m,p-Xylenes	10.0	9.88		ug/L		99	70 - 130	2	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 380-177726/6**  
**Matrix: Water**  
**Analysis Batch: 177726**

**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
m-Dichlorobenzene (1,3-DCB)	5.00	4.84		ug/L		97	70 - 130	2	20
Methyl-tert-butyl Ether (MTBE)	5.00	5.03		ug/L		101	70 - 130	0	20
Naphthalene	5.00	4.72		ug/L		94	70 - 130	0	20
n-Butylbenzene	5.00	4.69		ug/L		94	70 - 130	7	20
N-Propylbenzene	5.00	4.93		ug/L		99	70 - 130	2	20
o-Chlorotoluene	5.00	4.89		ug/L		98	70 - 130	0	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.76		ug/L		95	70 - 130	2	20
o-Xylene	5.00	4.85		ug/L		97	70 - 130	4	20
p-Chlorotoluene	5.00	4.97		ug/L		99	70 - 130	1	20
p-Dichlorobenzene (1,4-DCB)	5.00	4.88		ug/L		98	70 - 130	3	20
p-Isopropyltoluene	5.00	4.92		ug/L		98	70 - 130	2	20
sec-Butylbenzene	5.00	4.88		ug/L		98	70 - 130	0	20
Styrene	5.00	5.01		ug/L		100	70 - 130	3	20
Tert-amyl methyl ether	5.00	5.34		ug/L		107	70 - 130	1	20
1,3-Dichloropropene, Total	10.0	9.32		ug/L		93	70 - 130	3	20
Tert-butyl ethyl ether	5.00	5.22		ug/L		104	70 - 130	0	20
tert-Butylbenzene	5.00	4.96		ug/L		99	70 - 130	4	20
Tetrachloroethene (PCE)	5.00	4.65		ug/L		93	70 - 130	4	20
Toluene	5.00	4.68		ug/L		94	70 - 130	5	20
trans-1,2-Dichloroethylene	5.00	4.82		ug/L		96	70 - 130	3	20
trans-1,3-Dichloropropene	5.00	4.54		ug/L		91	70 - 130	0	20
Trichloroethylene (TCE)	5.00	4.97		ug/L		99	70 - 130	2	20
Bromoethane	5.00	5.33		ug/L		107	70 - 130	3	20
Trichlorofluoromethane (Freon 11)	5.00	4.88		ug/L		98	70 - 130	3	20
Trichlorotrifluoroethane	5.00	4.73		ug/L		95	70 - 130	1	20
Diisopropyl ether	5.00	5.04		ug/L		101	70 - 130	3	20
Vinyl Chloride (VC)	5.00	5.05		ug/L		101	70 - 130	4	20
Xylenes, Total	15.0	14.7		ug/L		98	70 - 130	3	20

Surrogate	%Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	98		70 - 130

**Lab Sample ID: MRL 380-177726/3**  
**Matrix: Water**  
**Analysis Batch: 177726**

**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	0.565		ug/L		113	50 - 150
Vinyl Chloride (VC)	0.250	0.323		ug/L		129	50 - 150

Surrogate	%Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Toluene-d8 (Surr)	100		70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177726/4**  
**Matrix: Water**  
**Analysis Batch: 177726**

**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	0.458	J	ug/L		92	50 - 150
1,1,1-Trichloroethane	0.500	0.497	J	ug/L		99	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.480	J	ug/L		96	50 - 150
1,1,2-Trichloroethane	0.500	0.467	J	ug/L		93	50 - 150
1,1-Dichloroethane	0.500	0.523		ug/L		105	50 - 150
1,1-Dichlorethylene	0.500	0.532		ug/L		106	50 - 150
1,1-Dichloropropene	0.500	0.507		ug/L		101	50 - 150
1,2,3-Trichlorobenzene	0.500	0.594		ug/L		119	50 - 150
1,2,3-Trichloropropane	0.500	0.475	J	ug/L		95	50 - 150
1,2,4-Trichlorobenzene	0.500	0.560		ug/L		112	50 - 150
1,2,4-Trimethylbenzene	0.500	0.497	J	ug/L		99	50 - 150
1,2-Dichloroethane	0.500	0.513		ug/L		103	50 - 150
1,2-Dichloropropane	0.500	0.551		ug/L		110	50 - 150
1,3,5-Trimethylbenzene	0.500	0.496	J	ug/L		99	50 - 150
1,3-Dichloropropane	0.500	0.522		ug/L		104	50 - 150
2,2-Dichloropropane	0.500	0.543		ug/L		109	50 - 150
2-Butanone (MEK)	5.00	4.88	J	ug/L		98	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.63		ug/L		113	50 - 150
Acetone	5.00	7.96	J ^3+	ug/L		159	50 - 150
Benzene	0.500	0.516		ug/L		103	50 - 150
Bromobenzene	0.500	0.473	J	ug/L		95	50 - 150
Bromochloromethane	0.500	0.513		ug/L		103	50 - 150
Bromodichloromethane	0.500	0.397	J	ug/L		79	50 - 150
Bromoform	0.500	0.532		ug/L		106	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.582		ug/L		116	50 - 150
Carbon disulfide	0.500	0.520		ug/L		104	50 - 150
Carbon tetrachloride	0.500	0.494	J	ug/L		99	50 - 150
Chlorobenzene	0.500	0.538		ug/L		108	50 - 150
Chlorodibromomethane	0.500	0.457	J	ug/L		91	50 - 150
cis-1,3-Dichloropropene	0.500	0.453	J	ug/L		91	50 - 150
Dichloromethane	0.500	0.519		ug/L		104	50 - 150
Ethylbenzene	0.500	0.546		ug/L		109	50 - 150
Hexachlorobutadiene	0.500	0.601		ug/L		120	50 - 150
Isopropylbenzene	0.500	0.499	J	ug/L		100	50 - 150
m,p-Xylenes	1.00	1.08		ug/L		108	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.481	J	ug/L		96	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.561		ug/L		112	50 - 150
Naphthalene	0.500	0.573		ug/L		115	50 - 150
n-Butylbenzene	0.500	0.541		ug/L		108	50 - 150
N-Propylbenzene	0.500	0.485	J	ug/L		97	50 - 150
o-Chlorotoluene	0.500	0.478	J	ug/L		96	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.512		ug/L		102	50 - 150
o-Xylene	0.500	0.519		ug/L		104	50 - 150
p-Chlorotoluene	0.500	0.482	J	ug/L		96	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.486	J	ug/L		97	50 - 150
p-Isopropyltoluene	0.500	0.499	J	ug/L		100	50 - 150
sec-Butylbenzene	0.500	0.491	J	ug/L		98	50 - 150
Styrene	0.500	0.535		ug/L		107	50 - 150

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177726/4**  
**Matrix: Water**  
**Analysis Batch: 177726**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Tert-amyl methyl ether	0.500	0.552	J	ug/L		110	50 - 150
1,3-Dichloropropene, Total	1.00	0.909		ug/L		91	50 - 150
Tert-butyl ethyl ether	0.500	0.562	J	ug/L		112	50 - 150
tert-Butylbenzene	0.500	0.502		ug/L		100	50 - 150
Tetrachloroethene (PCE)	0.500	0.520		ug/L		104	50 - 150
Toluene	0.500	0.521		ug/L		104	50 - 150
trans-1,2-Dichloroethylene	0.500	0.516		ug/L		103	50 - 150
trans-1,3-Dichloropropene	0.500	0.456	J	ug/L		91	50 - 150
Trichloroethylene (TCE)	0.500	0.509		ug/L		102	50 - 150
Bromoethane	0.500	0.538		ug/L		108	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.514		ug/L		103	50 - 150
Trichlorotrifluoroethane	0.500	0.530		ug/L		106	50 - 150
Diisopropyl ether	0.500	0.564	J	ug/L		113	50 - 150
Vinyl Chloride (VC)	0.500	0.517		ug/L		103	50 - 150
Xylenes, Total	1.50	1.60		ug/L		107	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		70 - 130
4-Bromofluorobenzene (Surr)	95		70 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: MB 380-177727/8**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			10/03/25 10:26	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,1-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 10:26	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/03/25 10:26	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/03/25 10:26	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/03/25 10:26	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/03/25 10:26	1
Acetone	<500		500	ug/L			10/03/25 10:26	1
Benzene	<0.50		0.50	ug/L			10/03/25 10:26	1
Bromobenzene	<0.50		0.50	ug/L			10/03/25 10:26	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177727/8**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Bromochloromethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Bromodichloromethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Bromoform	<0.50		0.50	ug/L			10/03/25 10:26	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/03/25 10:26	1
Carbon disulfide	<0.50		0.50	ug/L			10/03/25 10:26	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/03/25 10:26	1
Chlorobenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Chloroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/03/25 10:26	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 10:26	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 10:26	1
Dibromomethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Dichloromethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Ethylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/03/25 10:26	1
Isopropylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
m,p-Xylenes	<0.50		0.50	ug/L			10/03/25 10:26	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/03/25 10:26	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/03/25 10:26	1
Naphthalene	<0.50		0.50	ug/L			10/03/25 10:26	1
n-Butylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
N-Propylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 10:26	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/03/25 10:26	1
o-Xylene	<0.50		0.50	ug/L			10/03/25 10:26	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/03/25 10:26	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/03/25 10:26	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/03/25 10:26	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
Styrene	<0.50		0.50	ug/L			10/03/25 10:26	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/03/25 10:26	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/03/25 10:26	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/03/25 10:26	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/03/25 10:26	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/03/25 10:26	1
Toluene	<0.50		0.50	ug/L			10/03/25 10:26	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/03/25 10:26	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/03/25 10:26	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/03/25 10:26	1
Bromoethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/03/25 10:26	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/03/25 10:26	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/03/25 10:26	1
Diisopropyl ether	<3.0		3.0	ug/L			10/03/25 10:26	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/03/25 10:26	1
Xylenes, Total	<0.50		0.50	ug/L			10/03/25 10:26	1

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177727/8**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>		<i>10/03/25 10:26</i>	<i>1</i>

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1,2-Dichloroethane-d4 (Surr)</i>	<i>106</i>		<i>70 - 130</i>		<i>10/03/25 10:26</i>	<i>1</i>
<i>4-Bromofluorobenzene (Surr)</i>	<i>103</i>		<i>70 - 130</i>		<i>10/03/25 10:26</i>	<i>1</i>
<i>Toluene-d8 (Surr)</i>	<i>97</i>		<i>70 - 130</i>		<i>10/03/25 10:26</i>	<i>1</i>

**Lab Sample ID: LCS 380-177727/5**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

<b>Analyte</b>	<b>Spike Added</b>	<b>LCS Result</b>	<b>LCS Qualifier</b>	<b>Unit</b>	<b>D</b>	<b>%Rec</b>	<b>%Rec Limits</b>
1,1,1,2-Tetrachloroethane	5.00	4.30		ug/L		86	70 - 130
1,1,1-Trichloroethane	5.00	4.26		ug/L		85	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.13		ug/L		103	70 - 130
1,1,2-Trichloroethane	5.00	4.69		ug/L		94	70 - 130
1,1-Dichloroethane	5.00	4.64		ug/L		93	70 - 130
1,1-Dichlorethylene	5.00	4.27		ug/L		85	70 - 130
1,1-Dichloropropene	5.00	4.06		ug/L		81	70 - 130
1,2,3-Trichlorobenzene	5.00	4.45		ug/L		89	70 - 130
1,2,3-Trichloropropane	5.00	5.08		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	5.00	4.51		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	5.00	4.96		ug/L		99	70 - 130
1,2-Dichloroethane	5.00	4.64		ug/L		93	70 - 130
1,2-Dichloropropane	5.00	4.41		ug/L		88	70 - 130
1,3,5-Trimethylbenzene	5.00	4.85		ug/L		97	70 - 130
1,3-Dichloropropane	5.00	4.64		ug/L		93	70 - 130
2,2-Dichloropropane	5.00	3.91		ug/L		78	70 - 130
2-Butanone (MEK)	50.0	49.0		ug/L		98	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	45.8		ug/L		92	70 - 130
Acetone	50.0	48.2	J	ug/L		96	70 - 130
Benzene	5.00	4.57		ug/L		91	70 - 130
Bromobenzene	5.00	4.57		ug/L		91	70 - 130
Bromochloromethane	5.00	4.63		ug/L		93	70 - 130
Bromodichloromethane	5.00	4.19		ug/L		84	70 - 130
Bromoform	5.00	4.76		ug/L		95	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.75		ug/L		115	70 - 130
Carbon disulfide	5.00	3.84		ug/L		77	70 - 130
Carbon tetrachloride	5.00	3.96		ug/L		79	70 - 130
Chlorobenzene	5.00	4.58		ug/L		92	70 - 130
Chlorodibromomethane	5.00	4.27		ug/L		85	70 - 130
cis-1,3-Dichloropropene	5.00	3.95		ug/L		79	70 - 130
Dichloromethane	5.00	4.74		ug/L		95	70 - 130
Ethylbenzene	5.00	4.39		ug/L		88	70 - 130
Hexachlorobutadiene	5.00	5.41		ug/L		108	70 - 130
Isopropylbenzene	5.00	4.49		ug/L		90	70 - 130
m,p-Xylenes	10.0	8.92		ug/L		89	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.85		ug/L		97	70 - 130

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177727/5**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl-tert-butyl Ether (MTBE)	5.00	4.64		ug/L		93	70 - 130
Naphthalene	5.00	4.17		ug/L		83	70 - 130
n-Butylbenzene	5.00	4.54		ug/L		91	70 - 130
N-Propylbenzene	5.00	4.51		ug/L		90	70 - 130
o-Chlorotoluene	5.00	4.73		ug/L		95	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.65		ug/L		93	70 - 130
o-Xylene	5.00	4.63		ug/L		93	70 - 130
p-Chlorotoluene	5.00	4.69		ug/L		94	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.82		ug/L		96	70 - 130
p-Isopropyltoluene	5.00	4.91		ug/L		98	70 - 130
sec-Butylbenzene	5.00	4.74		ug/L		95	70 - 130
Styrene	5.00	4.45		ug/L		89	70 - 130
Tert-amyl methyl ether	5.00	4.18		ug/L		84	70 - 130
1,3-Dichloropropene, Total	10.0	7.98		ug/L		80	70 - 130
Tert-butyl ethyl ether	5.00	4.39		ug/L		88	70 - 130
tert-Butylbenzene	5.00	4.80		ug/L		96	70 - 130
Tetrachloroethene (PCE)	5.00	4.45		ug/L		89	70 - 130
Toluene	5.00	4.64		ug/L		93	70 - 130
trans-1,2-Dichloroethylene	5.00	4.46		ug/L		89	70 - 130
trans-1,3-Dichloropropene	5.00	4.03		ug/L		81	70 - 130
Trichloroethylene (TCE)	5.00	4.54		ug/L		91	70 - 130
Bromoethane	5.00	4.86		ug/L		97	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	3.90		ug/L		78	70 - 130
Trichlorotrifluoroethane	5.00	3.90		ug/L		78	70 - 130
Diisopropyl ether	5.00	4.55		ug/L		91	70 - 130
Vinyl Chloride (VC)	5.00	4.06		ug/L		81	70 - 130
Xylenes, Total	15.0	13.5		ug/L		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: LCSD 380-177727/6**  
**Matrix: Water**  
**Analysis Batch: 177727**

**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	4.47		ug/L		89	70 - 130	4	20
1,1,1-Trichloroethane	5.00	4.35		ug/L		87	70 - 130	2	20
1,1,1,2,2-Tetrachloroethane	5.00	5.28		ug/L		106	70 - 130	3	20
1,1,2-Trichloroethane	5.00	4.86		ug/L		97	70 - 130	4	20
1,1-Dichloroethane	5.00	4.72		ug/L		94	70 - 130	2	20
1,1-Dichloroethylene	5.00	4.30		ug/L		86	70 - 130	1	20
1,1-Dichloropropene	5.00	4.22		ug/L		84	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	4.74		ug/L		95	70 - 130	6	20
1,2,3-Trichloropropane	5.00	5.46		ug/L		109	70 - 130	7	20
1,2,4-Trichlorobenzene	5.00	4.69		ug/L		94	70 - 130	4	20

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 380-177727/6**  
**Matrix: Water**  
**Analysis Batch: 177727**

**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
1,2,4-Trimethylbenzene	5.00	5.23		ug/L		105	70 - 130	5	20
1,2-Dichloroethane	5.00	4.72		ug/L		94	70 - 130	2	20
1,2-Dichloropropane	5.00	4.53		ug/L		91	70 - 130	3	20
1,3,5-Trimethylbenzene	5.00	5.10		ug/L		102	70 - 130	5	20
1,3-Dichloropropane	5.00	4.83		ug/L		97	70 - 130	4	20
2,2-Dichloropropane	5.00	3.98		ug/L		80	70 - 130	2	20
2-Butanone (MEK)	50.0	49.7		ug/L		99	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	50.0	47.7		ug/L		95	70 - 130	4	20
Acetone	50.0	50.4	J	ug/L		101	70 - 130	4	20
Benzene	5.00	4.64		ug/L		93	70 - 130	2	20
Bromobenzene	5.00	4.77		ug/L		95	70 - 130	4	20
Bromochloromethane	5.00	4.68		ug/L		94	70 - 130	1	20
Bromodichloromethane	5.00	4.31		ug/L		86	70 - 130	3	20
Bromoform	5.00	5.05		ug/L		101	70 - 130	6	20
Bromomethane (Methyl Bromide)	5.00	5.82		ug/L		116	70 - 130	1	20
Carbon disulfide	5.00	3.96		ug/L		79	70 - 130	3	20
Carbon tetrachloride	5.00	4.17		ug/L		83	70 - 130	5	20
Chlorobenzene	5.00	4.73		ug/L		95	70 - 130	3	20
Chlorodibromomethane	5.00	4.43		ug/L		89	70 - 130	4	20
cis-1,3-Dichloropropene	5.00	4.06		ug/L		81	70 - 130	3	20
Dichloromethane	5.00	4.82		ug/L		96	70 - 130	2	20
Ethylbenzene	5.00	4.50		ug/L		90	70 - 130	2	20
Hexachlorobutadiene	5.00	5.76		ug/L		115	70 - 130	6	20
Isopropylbenzene	5.00	4.66		ug/L		93	70 - 130	4	20
m,p-Xylenes	10.0	9.14		ug/L		91	70 - 130	2	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.13		ug/L		103	70 - 130	6	20
Methyl-tert-butyl Ether (MTBE)	5.00	4.77		ug/L		95	70 - 130	3	20
Naphthalene	5.00	4.50		ug/L		90	70 - 130	8	20
n-Butylbenzene	5.00	4.66		ug/L		93	70 - 130	2	20
N-Propylbenzene	5.00	4.68		ug/L		94	70 - 130	4	20
o-Chlorotoluene	5.00	5.01		ug/L		100	70 - 130	6	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.81		ug/L		96	70 - 130	3	20
o-Xylene	5.00	4.78		ug/L		96	70 - 130	3	20
p-Chlorotoluene	5.00	4.85		ug/L		97	70 - 130	3	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.10		ug/L		102	70 - 130	6	20
p-Isopropyltoluene	5.00	5.07		ug/L		101	70 - 130	3	20
sec-Butylbenzene	5.00	5.01		ug/L		100	70 - 130	5	20
Styrene	5.00	4.55		ug/L		91	70 - 130	2	20
Tert-amyl methyl ether	5.00	4.41		ug/L		88	70 - 130	5	20
1,3-Dichloropropene, Total	10.0	8.26		ug/L		83	70 - 130	3	20
Tert-butyl ethyl ether	5.00	4.76		ug/L		95	70 - 130	8	20
tert-Butylbenzene	5.00	5.00		ug/L		100	70 - 130	4	20
Tetrachloroethene (PCE)	5.00	4.43		ug/L		89	70 - 130	0	20
Toluene	5.00	4.75		ug/L		95	70 - 130	2	20
trans-1,2-Dichloroethylene	5.00	4.54		ug/L		91	70 - 130	2	20
trans-1,3-Dichloropropene	5.00	4.20		ug/L		84	70 - 130	4	20
Trichloroethylene (TCE)	5.00	4.59		ug/L		92	70 - 130	1	20
Bromoethane	5.00	5.02		ug/L		100	70 - 130	3	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 380-177727/6**  
**Matrix: Water**  
**Analysis Batch: 177727**

**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
Trichlorofluoromethane (Freon 11)	5.00	3.99		ug/L		80	70 - 130	2	20
Trichlorotrifluoroethane	5.00	4.04		ug/L		81	70 - 130	3	20
Diisopropyl ether	5.00	4.73		ug/L		95	70 - 130	4	20
Vinyl Chloride (VC)	5.00	4.14		ug/L		83	70 - 130	2	20
Xylenes, Total	15.0	13.9		ug/L		93	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	101		70 - 130

**Lab Sample ID: MRL 380-177727/3**  
**Matrix: Water**  
**Analysis Batch: 177727**

**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	0.250	0.413	J ^3+	ug/L		165	50 - 150
Vinyl Chloride (VC)	0.125	0.241	J ^3+	ug/L		193	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: MRL 380-177727/4**  
**Matrix: Water**  
**Analysis Batch: 177727**

**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	0.329	J	ug/L		66	50 - 150
1,1,1-Trichloroethane	0.500	0.343	J	ug/L		69	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.505		ug/L		101	50 - 150
1,1,2-Trichloroethane	0.500	0.430	J	ug/L		86	50 - 150
1,1-Dichloroethane	0.500	0.466	J	ug/L		93	50 - 150
1,1-Dichloroethylene	0.500	0.340	J	ug/L		68	50 - 150
1,1-Dichloropropene	0.500	0.329	J	ug/L		66	50 - 150
1,2,3-Trichlorobenzene	0.500	0.448	J	ug/L		90	50 - 150
1,2,3-Trichloropropane	0.500	0.512		ug/L		102	50 - 150
1,2,4-Trichlorobenzene	0.500	0.428	J	ug/L		86	50 - 150
1,2,4-Trimethylbenzene	0.500	0.440	J	ug/L		88	50 - 150
1,2-Dichloroethane	0.500	0.459	J	ug/L		92	50 - 150
1,2-Dichloropropane	0.500	0.418	J	ug/L		84	50 - 150
1,3,5-Trimethylbenzene	0.500	0.406	J	ug/L		81	50 - 150
1,3-Dichloropropane	0.500	0.437	J	ug/L		87	50 - 150
2,2-Dichloropropane	0.500	0.360	J	ug/L		72	50 - 150
2-Butanone (MEK)	5.00	5.24		ug/L		105	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	3.88	J	ug/L		78	50 - 150

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177727/4**  
**Matrix: Water**  
**Analysis Batch: 177727**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	5.00	5.44	J	ug/L		109	50 - 150
Benzene	0.500	0.518		ug/L		104	50 - 150
Bromobenzene	0.500	0.424	J	ug/L		85	50 - 150
Bromochloromethane	0.500	0.432	J	ug/L		86	50 - 150
Bromodichloromethane	0.500	0.361	J	ug/L		72	50 - 150
Bromoform	0.500	0.259	J	ug/L		52	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.464	J	ug/L		93	50 - 150
Carbon disulfide	0.500	0.348	J	ug/L		70	50 - 150
Carbon tetrachloride	0.500	0.280	J	ug/L		56	50 - 150
Chlorobenzene	0.500	0.432	J	ug/L		86	50 - 150
Chlorodibromomethane	0.500	0.338	J	ug/L		68	50 - 150
cis-1,3-Dichloropropene	0.500	0.323	J	ug/L		65	50 - 150
Dichloromethane	0.500	0.489	J	ug/L		98	50 - 150
Ethylbenzene	0.500	0.379	J	ug/L		76	50 - 150
Isopropylbenzene	0.500	0.368	J	ug/L		74	50 - 150
m,p-Xylenes	1.00	0.745		ug/L		75	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.476	J	ug/L		95	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.441	J	ug/L		88	50 - 150
Naphthalene	0.500	0.405	J	ug/L		81	50 - 150
n-Butylbenzene	0.500	0.368	J	ug/L		74	50 - 150
N-Propylbenzene	0.500	0.375	J	ug/L		75	50 - 150
o-Chlorotoluene	0.500	0.452	J	ug/L		90	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.446	J	ug/L		89	50 - 150
o-Xylene	0.500	0.389	J	ug/L		78	50 - 150
p-Chlorotoluene	0.500	0.410	J	ug/L		82	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.462	J	ug/L		92	50 - 150
p-Isopropyltoluene	0.500	0.390	J	ug/L		78	50 - 150
sec-Butylbenzene	0.500	0.383	J	ug/L		77	50 - 150
Styrene	0.500	0.358	J	ug/L		72	50 - 150
Tert-amyl methyl ether	0.500	0.391	J	ug/L		78	50 - 150
1,3-Dichloropropene, Total	1.00	0.635		ug/L		64	50 - 150
Tert-butyl ethyl ether	0.500	0.439	J	ug/L		88	50 - 150
tert-Butylbenzene	0.500	0.400	J	ug/L		80	50 - 150
Tetrachloroethene (PCE)	0.500	0.383	J	ug/L		77	50 - 150
Toluene	0.500	0.455	J	ug/L		91	50 - 150
trans-1,2-Dichloroethylene	0.500	0.420	J	ug/L		84	50 - 150
trans-1,3-Dichloropropene	0.500	0.312	J	ug/L		62	50 - 150
Trichloroethylene (TCE)	0.500	0.416	J	ug/L		83	50 - 150
Bromoethane	0.500	0.436	J	ug/L		87	50 - 150
Diisopropyl ether	0.500	0.469	J	ug/L		94	50 - 150
Vinyl Chloride (VC)	0.500	0.325		ug/L		65	50 - 150
Xylenes, Total	1.50	1.13		ug/L		76	50 - 150

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

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-178027/15**  
**Matrix: Water**  
**Analysis Batch: 178027**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Tertiary Butyl Alcohol (TBA)	<2.0		2.0	ug/L			10/06/25 16:55	1
1,1,1-Trichloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,1,2,2-Tetrachloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,1,2-Trichloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,1-Dichloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,1-Dichlorethylene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,1-Dichloropropene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2,3-Trichlorobenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2,3-Trichloropropane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2,4-Trichlorobenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2,4-Trimethylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,2-Dichloropropane	<0.50		0.50	ug/L			10/06/25 16:55	1
1,3,5-Trimethylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
1,3-Dichloropropane	<0.50		0.50	ug/L			10/06/25 16:55	1
2,2-Dichloropropane	<0.50		0.50	ug/L			10/06/25 16:55	1
2-Butanone (MEK)	<5.0		5.0	ug/L			10/06/25 16:55	1
4-Methyl-2-pentanone (MIBK)	<5.0		5.0	ug/L			10/06/25 16:55	1
Acetone	<500		500	ug/L			10/06/25 16:55	1
Benzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromobenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromochloromethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromodichloromethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromoform	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromomethane (Methyl Bromide)	<0.50		0.50	ug/L			10/06/25 16:55	1
Carbon disulfide	<0.50		0.50	ug/L			10/06/25 16:55	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/06/25 16:55	1
Chlorobenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Chlorodibromomethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Chloroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Chloroform (Trichloromethane)	<0.50		0.50	ug/L			10/06/25 16:55	1
cis-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/06/25 16:55	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/06/25 16:55	1
Dibromomethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Dichloromethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Ethylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/06/25 16:55	1
Isopropylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
m,p-Xylenes	<0.50		0.50	ug/L			10/06/25 16:55	1
m-Dichlorobenzene (1,3-DCB)	<0.50		0.50	ug/L			10/06/25 16:55	1
Methyl-tert-butyl Ether (MTBE)	<0.50		0.50	ug/L			10/06/25 16:55	1
Naphthalene	<0.50		0.50	ug/L			10/06/25 16:55	1
n-Butylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
N-Propylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
o-Chlorotoluene	<0.50		0.50	ug/L			10/06/25 16:55	1
o-Dichlorobenzene (1,2-DCB)	<0.50		0.50	ug/L			10/06/25 16:55	1

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-178027/15**  
**Matrix: Water**  
**Analysis Batch: 178027**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.50		0.50	ug/L			10/06/25 16:55	1
p-Chlorotoluene	<0.50		0.50	ug/L			10/06/25 16:55	1
p-Dichlorobenzene (1,4-DCB)	<0.50		0.50	ug/L			10/06/25 16:55	1
p-Isopropyltoluene	<0.50		0.50	ug/L			10/06/25 16:55	1
sec-Butylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Styrene	<0.50		0.50	ug/L			10/06/25 16:55	1
Tert-amyl methyl ether	<3.0		3.0	ug/L			10/06/25 16:55	1
1,3-Dichloropropene, Total	<0.50		0.50	ug/L			10/06/25 16:55	1
Tert-butyl ethyl ether	<3.0		3.0	ug/L			10/06/25 16:55	1
tert-Butylbenzene	<0.50		0.50	ug/L			10/06/25 16:55	1
Tetrachloroethene (PCE)	<0.50		0.50	ug/L			10/06/25 16:55	1
Toluene	<0.50		0.50	ug/L			10/06/25 16:55	1
trans-1,2-Dichloroethylene	<0.50		0.50	ug/L			10/06/25 16:55	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/06/25 16:55	1
Trichloroethylene (TCE)	<0.50		0.50	ug/L			10/06/25 16:55	1
Bromoethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/06/25 16:55	1
Chloromethane (methyl chloride)	<0.50		0.50	ug/L			10/06/25 16:55	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/06/25 16:55	1
Diisopropyl ether	<3.0		3.0	ug/L			10/06/25 16:55	1
Vinyl Chloride (VC)	<0.30		0.30	ug/L			10/06/25 16:55	1
Xylenes, Total	<0.50		0.50	ug/L			10/06/25 16:55	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	0.845	T J	ug/L		3.12	N/A		10/06/25 16:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		10/06/25 16:55	1
4-Bromofluorobenzene (Surr)	100		70 - 130		10/06/25 16:55	1
Toluene-d8 (Surr)	98		70 - 130		10/06/25 16:55	1

**Lab Sample ID: LCS 380-178027/11**  
**Matrix: Water**  
**Analysis Batch: 178027**

**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	4.37		ug/L		87	70 - 130
1,1,1-Trichloroethane	5.00	4.40		ug/L		88	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.27		ug/L		105	70 - 130
1,1,2-Trichloroethane	5.00	4.44		ug/L		89	70 - 130
1,1-Dichloroethane	5.00	4.49		ug/L		90	70 - 130
1,1-Dichlorethylene	5.00	4.61		ug/L		92	70 - 130
1,1-Dichloropropene	5.00	4.35		ug/L		87	70 - 130
1,2,3-Trichlorobenzene	5.00	4.66		ug/L		93	70 - 130
1,2,3-Trichloropropane	5.00	5.10		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	5.00	4.69		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	5.00	4.87		ug/L		97	70 - 130
1,2-Dichloroethane	5.00	4.64		ug/L		93	70 - 130

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-178027/11**  
**Matrix: Water**  
**Analysis Batch: 178027**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	5.00	4.41		ug/L		88	70 - 130
1,3,5-Trimethylbenzene	5.00	4.99		ug/L		100	70 - 130
1,3-Dichloropropane	5.00	4.55		ug/L		91	70 - 130
2,2-Dichloropropane	5.00	4.08		ug/L		82	70 - 130
2-Butanone (MEK)	50.0	50.7		ug/L		101	70 - 130
4-Methyl-2-pentanone (MIBK)	50.0	47.1		ug/L		94	70 - 130
Acetone	50.0	50.3	J	ug/L		101	70 - 130
Benzene	5.00	4.29		ug/L		86	70 - 130
Bromobenzene	5.00	4.58		ug/L		92	70 - 130
Bromochloromethane	5.00	4.71		ug/L		94	70 - 130
Bromodichloromethane	5.00	4.16		ug/L		83	70 - 130
Bromoform	5.00	4.54		ug/L		91	70 - 130
Bromomethane (Methyl Bromide)	5.00	5.49		ug/L		110	70 - 130
Carbon disulfide	5.00	4.46		ug/L		89	70 - 130
Carbon tetrachloride	5.00	4.26		ug/L		85	70 - 130
Chlorobenzene	5.00	4.60		ug/L		92	70 - 130
Chlorodibromomethane	5.00	4.15		ug/L		83	70 - 130
cis-1,3-Dichloropropene	5.00	4.02		ug/L		80	70 - 130
Dichloromethane	5.00	4.47		ug/L		89	70 - 130
Ethylbenzene	5.00	4.55		ug/L		91	70 - 130
Hexachlorobutadiene	5.00	5.03		ug/L		101	70 - 130
Isopropylbenzene	5.00	4.73		ug/L		95	70 - 130
m,p-Xylenes	10.0	9.19		ug/L		92	70 - 130
m-Dichlorobenzene (1,3-DCB)	5.00	4.93		ug/L		99	70 - 130
Methyl-tert-butyl Ether (MTBE)	5.00	4.24		ug/L		85	70 - 130
Naphthalene	5.00	4.70		ug/L		94	70 - 130
n-Butylbenzene	5.00	4.60		ug/L		92	70 - 130
N-Propylbenzene	5.00	4.77		ug/L		95	70 - 130
o-Chlorotoluene	5.00	4.88		ug/L		98	70 - 130
o-Dichlorobenzene (1,2-DCB)	5.00	4.70		ug/L		94	70 - 130
o-Xylene	5.00	4.78		ug/L		96	70 - 130
p-Chlorotoluene	5.00	4.78		ug/L		96	70 - 130
p-Dichlorobenzene (1,4-DCB)	5.00	4.84		ug/L		97	70 - 130
p-Isopropyltoluene	5.00	5.03		ug/L		101	70 - 130
sec-Butylbenzene	5.00	5.05		ug/L		101	70 - 130
Styrene	5.00	4.54		ug/L		91	70 - 130
Tert-amyl methyl ether	5.00	4.32		ug/L		86	70 - 130
1,3-Dichloropropene, Total	10.0	8.23		ug/L		82	70 - 130
Tert-butyl ethyl ether	5.00	4.40		ug/L		88	70 - 130
tert-Butylbenzene	5.00	5.00		ug/L		100	70 - 130
Tetrachloroethene (PCE)	5.00	4.54		ug/L		91	70 - 130
Toluene	5.00	4.42		ug/L		88	70 - 130
trans-1,2-Dichloroethylene	5.00	4.42		ug/L		88	70 - 130
trans-1,3-Dichloropropene	5.00	4.21		ug/L		84	70 - 130
Trichloroethylene (TCE)	5.00	4.48		ug/L		90	70 - 130
Bromoethane	5.00	4.48		ug/L		90	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	4.35		ug/L		87	70 - 130
Trichlorotrifluoroethane	5.00	4.64		ug/L		93	70 - 130

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-178027/11**  
**Matrix: Water**  
**Analysis Batch: 178027**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diisopropyl ether	5.00	4.24		ug/L		85	70 - 130
Vinyl Chloride (VC)	5.00	4.74		ug/L		95	70 - 130
Xylenes, Total	15.0	14.0		ug/L		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Toluene-d8 (Surr)	102		70 - 130

**Lab Sample ID: LCSD 380-178027/12**  
**Matrix: Water**  
**Analysis Batch: 178027**

**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	4.50		ug/L		90	70 - 130	3	20
1,1,1-Trichloroethane	5.00	4.50		ug/L		90	70 - 130	2	20
1,1,2,2-Tetrachloroethane	5.00	5.44		ug/L		109	70 - 130	3	20
1,1,2-Trichloroethane	5.00	4.51		ug/L		90	70 - 130	2	20
1,1-Dichloroethane	5.00	4.70		ug/L		94	70 - 130	5	20
1,1-Dichlorethylene	5.00	4.80		ug/L		96	70 - 130	4	20
1,1-Dichloropropene	5.00	4.58		ug/L		92	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	4.83		ug/L		97	70 - 130	4	20
1,2,3-Trichloropropane	5.00	5.21		ug/L		104	70 - 130	2	20
1,2,4-Trichlorobenzene	5.00	4.90		ug/L		98	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.09		ug/L		102	70 - 130	4	20
1,2-Dichloroethane	5.00	4.76		ug/L		95	70 - 130	3	20
1,2-Dichloropropane	5.00	4.63		ug/L		93	70 - 130	5	20
1,3,5-Trimethylbenzene	5.00	5.18		ug/L		104	70 - 130	4	20
1,3-Dichloropropane	5.00	4.57		ug/L		91	70 - 130	1	20
2,2-Dichloropropane	5.00	4.30		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	50.0	51.2		ug/L		102	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	50.0	47.6		ug/L		95	70 - 130	1	20
Acetone	50.0	51.1	J	ug/L		102	70 - 130	2	20
Benzene	5.00	4.45		ug/L		89	70 - 130	4	20
Bromobenzene	5.00	4.77		ug/L		95	70 - 130	4	20
Bromochloromethane	5.00	4.95		ug/L		99	70 - 130	5	20
Bromodichloromethane	5.00	4.37		ug/L		87	70 - 130	5	20
Bromoform	5.00	4.67		ug/L		93	70 - 130	3	20
Bromomethane (Methyl Bromide)	5.00	5.83		ug/L		117	70 - 130	6	20
Carbon disulfide	5.00	4.61		ug/L		92	70 - 130	3	20
Carbon tetrachloride	5.00	4.35		ug/L		87	70 - 130	2	20
Chlorobenzene	5.00	4.74		ug/L		95	70 - 130	3	20
Chlorodibromomethane	5.00	4.18		ug/L		84	70 - 130	1	20
cis-1,3-Dichloropropene	5.00	4.14		ug/L		83	70 - 130	3	20
Dichloromethane	5.00	4.59		ug/L		92	70 - 130	3	20
Ethylbenzene	5.00	4.70		ug/L		94	70 - 130	3	20
Hexachlorobutadiene	5.00	5.42		ug/L		108	70 - 130	8	20
Isopropylbenzene	5.00	4.97		ug/L		99	70 - 130	5	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 380-178027/12**  
**Matrix: Water**  
**Analysis Batch: 178027**

**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
m,p-Xylenes	10.0	9.57		ug/L		96	70 - 130	4	20
m-Dichlorobenzene (1,3-DCB)	5.00	5.14		ug/L		103	70 - 130	4	20
Methyl-tert-butyl Ether (MTBE)	5.00	4.32		ug/L		86	70 - 130	2	20
Naphthalene	5.00	4.87		ug/L		97	70 - 130	4	20
n-Butylbenzene	5.00	4.92		ug/L		98	70 - 130	7	20
N-Propylbenzene	5.00	5.05		ug/L		101	70 - 130	6	20
o-Chlorotoluene	5.00	5.04		ug/L		101	70 - 130	3	20
o-Dichlorobenzene (1,2-DCB)	5.00	4.87		ug/L		97	70 - 130	3	20
o-Xylene	5.00	4.94		ug/L		99	70 - 130	3	20
p-Chlorotoluene	5.00	5.01		ug/L		100	70 - 130	5	20
p-Dichlorobenzene (1,4-DCB)	5.00	5.05		ug/L		101	70 - 130	4	20
p-Isopropyltoluene	5.00	5.38		ug/L		108	70 - 130	7	20
sec-Butylbenzene	5.00	5.33		ug/L		107	70 - 130	5	20
Styrene	5.00	4.69		ug/L		94	70 - 130	3	20
Tert-amyl methyl ether	5.00	4.39		ug/L		88	70 - 130	1	20
1,3-Dichloropropene, Total	10.0	8.37		ug/L		84	70 - 130	2	20
Tert-butyl ethyl ether	5.00	4.30		ug/L		86	70 - 130	2	20
tert-Butylbenzene	5.00	5.27		ug/L		105	70 - 130	5	20
Tetrachloroethene (PCE)	5.00	4.68		ug/L		94	70 - 130	3	20
Toluene	5.00	4.62		ug/L		92	70 - 130	4	20
trans-1,2-Dichloroethylene	5.00	4.63		ug/L		93	70 - 130	5	20
trans-1,3-Dichloropropene	5.00	4.23		ug/L		85	70 - 130	0	20
Trichloroethylene (TCE)	5.00	4.64		ug/L		93	70 - 130	3	20
Bromoethane	5.00	4.72		ug/L		94	70 - 130	5	20
Trichlorofluoromethane (Freon 11)	5.00	4.69		ug/L		94	70 - 130	7	20
Trichlorotrifluoroethane	5.00	4.80		ug/L		96	70 - 130	3	20
Diisopropyl ether	5.00	4.31		ug/L		86	70 - 130	2	20
Vinyl Chloride (VC)	5.00	4.92		ug/L		98	70 - 130	4	20
Xylenes, Total	15.0	14.5		ug/L		97	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130
Toluene-d8 (Surr)	100		70 - 130

**Lab Sample ID: MRL 380-178027/13**  
**Matrix: Water**  
**Analysis Batch: 178027**

**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	0.457	J	ug/L		91	50 - 150
Vinyl Chloride (VC)	0.250	0.251	J	ug/L		100	50 - 150

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

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-178027/14**  
**Matrix: Water**  
**Analysis Batch: 178027**

**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	0.451	J	ug/L		90	50 - 150
1,1,1-Trichloroethane	0.500	0.437	J	ug/L		87	50 - 150
1,1,2,2-Tetrachloroethane	0.500	0.516		ug/L		103	50 - 150
1,1,2-Trichloroethane	0.500	0.501		ug/L		100	50 - 150
1,1-Dichloroethane	0.500	0.485	J	ug/L		97	50 - 150
1,1-Dichlorethylene	0.500	0.453	J	ug/L		91	50 - 150
1,1-Dichloropropene	0.500	0.457	J	ug/L		91	50 - 150
1,2,3-Trichlorobenzene	0.500	0.583		ug/L		117	50 - 150
1,2,3-Trichloropropane	0.500	0.561		ug/L		112	50 - 150
1,2,4-Trichlorobenzene	0.500	0.573		ug/L		115	50 - 150
1,2,4-Trimethylbenzene	0.500	0.497	J	ug/L		99	50 - 150
1,2-Dichloroethane	0.500	0.514		ug/L		103	50 - 150
1,2-Dichloropropane	0.500	0.485	J	ug/L		97	50 - 150
1,3,5-Trimethylbenzene	0.500	0.472	J	ug/L		94	50 - 150
1,3-Dichloropropane	0.500	0.497	J	ug/L		99	50 - 150
2,2-Dichloropropane	0.500	0.430	J	ug/L		86	50 - 150
2-Butanone (MEK)	5.00	6.09		ug/L		122	50 - 150
4-Methyl-2-pentanone (MIBK)	5.00	5.45		ug/L		109	50 - 150
Acetone	5.00	6.57	J	ug/L		131	50 - 150
Benzene	0.500	0.523		ug/L		105	50 - 150
Bromobenzene	0.500	0.488	J	ug/L		98	50 - 150
Bromochloromethane	0.500	0.481	J	ug/L		96	50 - 150
Bromodichloromethane	0.500	0.452	J	ug/L		90	50 - 150
Bromoform	0.500	0.510		ug/L		102	50 - 150
Bromomethane (Methyl Bromide)	0.500	0.696		ug/L		139	50 - 150
Carbon disulfide	0.500	0.565		ug/L		113	50 - 150
Carbon tetrachloride	0.500	0.408	J	ug/L		82	50 - 150
Chlorobenzene	0.500	0.473	J	ug/L		95	50 - 150
Chlorodibromomethane	0.500	0.414	J	ug/L		83	50 - 150
cis-1,3-Dichloropropene	0.500	0.397	J	ug/L		79	50 - 150
Dichloromethane	0.500	0.501		ug/L		100	50 - 150
Ethylbenzene	0.500	0.454	J	ug/L		91	50 - 150
Hexachlorobutadiene	0.500	0.624		ug/L		125	50 - 150
Isopropylbenzene	0.500	0.441	J	ug/L		88	50 - 150
m,p-Xylenes	1.00	0.900		ug/L		90	50 - 150
m-Dichlorobenzene (1,3-DCB)	0.500	0.513		ug/L		103	50 - 150
Methyl-tert-butyl Ether (MTBE)	0.500	0.577		ug/L		115	50 - 150
Naphthalene	0.500	0.532		ug/L		106	50 - 150
n-Butylbenzene	0.500	0.464	J	ug/L		93	50 - 150
N-Propylbenzene	0.500	0.447	J	ug/L		89	50 - 150
o-Chlorotoluene	0.500	0.458	J	ug/L		92	50 - 150
o-Dichlorobenzene (1,2-DCB)	0.500	0.504		ug/L		101	50 - 150
o-Xylene	0.500	0.461	J	ug/L		92	50 - 150
p-Chlorotoluene	0.500	0.463	J	ug/L		93	50 - 150
p-Dichlorobenzene (1,4-DCB)	0.500	0.504		ug/L		101	50 - 150
p-Isopropyltoluene	0.500	0.498	J	ug/L		100	50 - 150
sec-Butylbenzene	0.500	0.490	J	ug/L		98	50 - 150
Styrene	0.500	0.439	J	ug/L		88	50 - 150

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-178027/14**  
**Matrix: Water**  
**Analysis Batch: 178027**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Tert-amyl methyl ether	0.500	0.558	J	ug/L		112	50 - 150
1,3-Dichloropropene, Total	1.00	0.783		ug/L		78	50 - 150
Tert-butyl ethyl ether	0.500	0.572	J	ug/L		114	50 - 150
tert-Butylbenzene	0.500	0.516		ug/L		103	50 - 150
Tetrachloroethene (PCE)	0.500	0.447	J	ug/L		89	50 - 150
Toluene	0.500	0.504		ug/L		101	50 - 150
trans-1,2-Dichloroethylene	0.500	0.490	J	ug/L		98	50 - 150
trans-1,3-Dichloropropene	0.500	0.386	J	ug/L		77	50 - 150
Trichloroethylene (TCE)	0.500	0.469	J	ug/L		94	50 - 150
Bromoethane	0.500	0.546		ug/L		109	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.376	J	ug/L		75	50 - 150
Trichlorotrifluoroethane	0.500	0.573		ug/L		115	50 - 150
Diisopropyl ether	0.500	0.649	J	ug/L		130	50 - 150
Vinyl Chloride (VC)	0.500	0.487		ug/L		97	50 - 150
Xylenes, Total	1.50	1.36		ug/L		91	50 - 150

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

**Lab Sample ID: MRL 380-178175/3**  
**Matrix: Water**  
**Analysis Batch: 178175**

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

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130
Toluene-d8 (Surr)	99		70 - 130

**Lab Sample ID: MRL 380-178175/4**  
**Matrix: Water**  
**Analysis Batch: 178175**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobutadiene	0.500	0.672		ug/L		134	50 - 150
Trichlorofluoromethane (Freon 11)	0.500	0.414	J	ug/L		83	50 - 150
Trichlorotrifluoroethane	0.500	0.567		ug/L		113	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		70 - 130
4-Bromofluorobenzene (Surr)	106		70 - 130
Toluene-d8 (Surr)	102		70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-178240/5**  
**Matrix: Water**  
**Analysis Batch: 178240**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.50		0.50	ug/L			10/07/25 23:48	1
Hexachlorobutadiene	<0.50		0.50	ug/L			10/07/25 23:48	1
Trichlorofluoromethane (Freon 11)	<0.50		0.50	ug/L			10/07/25 23:48	1
Trichlorotrifluoroethane	<0.50		0.50	ug/L			10/07/25 23:48	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A		10/07/25 23:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 130		10/07/25 23:48	1
4-Bromofluorobenzene (Surr)	107		70 - 130		10/07/25 23:48	1
Toluene-d8 (Surr)	99		70 - 130		10/07/25 23:48	1

**Lab Sample ID: LCS 380-178240/3**  
**Matrix: Water**  
**Analysis Batch: 178240**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobutadiene	5.00	5.05		ug/L		101	70 - 130
Trichlorofluoromethane (Freon 11)	5.00	4.32		ug/L		86	70 - 130
Trichlorotrifluoroethane	5.00	4.68		ug/L		94	70 - 130

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

**Lab Sample ID: LCSD 380-178240/4**  
**Matrix: Water**  
**Analysis Batch: 178240**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexachlorobutadiene	5.00	5.46		ug/L		109	70 - 130	8	20
Trichlorofluoromethane (Freon 11)	5.00	4.36		ug/L		87	70 - 130	1	20
Trichlorotrifluoroethane	5.00	4.67		ug/L		93	70 - 130	0	20

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

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177756/20-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
2,4'-DDD	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
2,4'-DDE	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
2,4'-DDT	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
4,4'-DDD	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
4,4'-DDE	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
4,4'-DDT	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Acenaphthene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Acenaphthylene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Acetochlor	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Alachlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
alpha-BHC	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
alpha-Chlordane	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Anthracene	<0.020		0.020	ug/L		10/03/25 09:45	10/06/25 13:15	1
Atrazine	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Benz(a)anthracene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Benzo[a]pyrene	<0.020		0.020	ug/L		10/03/25 09:45	10/06/25 13:15	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		10/03/25 09:45	10/06/25 13:15	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		10/03/25 09:45	10/06/25 13:15	1
beta-BHC	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		10/03/25 09:45	10/06/25 13:15	1
Aldrin	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Bromacil	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Butachlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Butylbenzylphthalate	<0.50		0.50	ug/L		10/03/25 09:45	10/06/25 13:15	1
Chlorobenzilate	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Chloroneb	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Chlorpyrifos	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Chrysene	<0.020		0.020	ug/L		10/03/25 09:45	10/06/25 13:15	1
delta-BHC	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		10/03/25 09:45	10/06/25 13:15	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Dieldrin	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Diethylphthalate	<0.50		0.50	ug/L		10/03/25 09:45	10/06/25 13:15	1
Dimethylphthalate	<0.50		0.50	ug/L		10/03/25 09:45	10/06/25 13:15	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		10/03/25 09:45	10/06/25 13:15	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Endosulfan sulfate	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Endrin	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Endrin aldehyde	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
EPTC	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Fluoranthene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 380-177756/20-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
gamma-BHC (Lindane)	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
gamma-Chlordane	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Heptachlor	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Hexachlorobenzene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Isophorone	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Malathion	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Methoxychlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Metolachlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Molinate	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Naphthalene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Parathion	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Phenanthrene	<0.040		0.040	ug/L		10/03/25 09:45	10/06/25 13:15	1
Propachlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Pyrene	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Simazine	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Terbacil	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Terbutylazine	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Thiobencarb	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		10/03/25 09:45	10/06/25 13:15	1
trans-Nonachlor	<0.050		0.050	ug/L		10/03/25 09:45	10/06/25 13:15	1
Trifluralin	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
1-Methylnaphthalene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1
2-Methylnaphthalene	<0.099		0.099	ug/L		10/03/25 09:45	10/06/25 13:15	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Decane	1.90	T J N	ug/L		2.74	124-18-5	10/03/25 09:45	10/06/25 13:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	101		70 - 130	10/03/25 09:45	10/06/25 13:15	1
Perylene-d12	88		70 - 130	10/03/25 09:45	10/06/25 13:15	1
Triphenylphosphate	90		70 - 130	10/03/25 09:45	10/06/25 13:15	1

**Lab Sample ID: LCS 380-177756/22-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2,4'-DDD	1.99	1.89		ug/L		95	70 - 130
2,4'-DDE	1.99	2.09		ug/L		105	70 - 130
2,4'-DDT	1.99	1.82		ug/L		92	70 - 130
2,4-Dinitrotoluene	1.99	1.76		ug/L		89	70 - 130
2,6-Dinitrotoluene	1.99	1.86		ug/L		94	70 - 130
4,4'-DDD	1.99	1.94		ug/L		98	70 - 130

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177756/22-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDE	1.99	1.83		ug/L		92	70 - 130
4,4'-DDT	1.99	1.83		ug/L		92	70 - 130
Acenaphthene	1.99	2.02		ug/L		102	70 - 130
Acenaphthylene	1.99	1.82		ug/L		92	70 - 130
Acetochlor	1.99	2.06		ug/L		104	70 - 130
Alachlor	1.99	2.20		ug/L		111	70 - 130
alpha-BHC	1.99	1.99		ug/L		100	70 - 130
alpha-Chlordane	1.99	1.96		ug/L		99	70 - 130
Anthracene	1.99	1.99		ug/L		100	70 - 130
Atrazine	1.99	1.90		ug/L		96	70 - 130
Benz(a)anthracene	1.99	2.04		ug/L		103	70 - 130
Benzo[a]pyrene	1.99	2.13		ug/L		108	70 - 130
Benzo[b]fluoranthene	1.99	2.12		ug/L		107	70 - 130
Benzo[g,h,i]perylene	1.99	2.05		ug/L		103	70 - 130
Benzo[k]fluoranthene	1.99	2.03		ug/L		102	70 - 130
beta-BHC	1.99	1.99		ug/L		100	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.02		ug/L		102	70 - 130
Aldrin	1.99	1.81		ug/L		91	70 - 130
Bromacil	1.99	1.96		ug/L		99	70 - 130
Butachlor	1.99	2.07		ug/L		104	70 - 130
Butylbenzylphthalate	1.99	2.32		ug/L		117	70 - 130
Chlorobenzilate	1.99	2.12		ug/L		107	70 - 130
Chloroneb	1.99	2.00		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	1.94		ug/L		98	70 - 130
Chlorpyrifos	1.99	2.01		ug/L		101	70 - 130
Chrysene	1.99	2.00		ug/L		101	70 - 130
delta-BHC	1.99	1.95		ug/L		98	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.09		ug/L		105	70 - 130
Dibenz(a,h)anthracene	1.99	2.02		ug/L		102	70 - 130
Diclorvos (DDVP)	1.99	2.11		ug/L		106	70 - 130
Dieldrin	1.99	2.09		ug/L		106	70 - 130
Diethylphthalate	1.99	2.15		ug/L		108	70 - 130
Dimethylphthalate	1.99	2.13		ug/L		107	70 - 130
Di-n-butyl phthalate	3.97	4.31		ug/L		108	70 - 130
Di-n-octyl phthalate	1.99	1.91		ug/L		96	70 - 130
Endosulfan I (Alpha)	1.99	2.01		ug/L		101	70 - 130
Endosulfan II (Beta)	1.99	2.13		ug/L		107	70 - 130
Endosulfan sulfate	1.99	1.98		ug/L		100	70 - 130
Endrin	1.99	2.04		ug/L		103	70 - 130
Endrin aldehyde	1.99	1.98		ug/L		100	60 - 130
EPTC	1.99	2.13		ug/L		108	70 - 130
Fluoranthene	1.99	2.01		ug/L		101	70 - 130
Fluorene	1.99	2.13		ug/L		107	70 - 130
gamma-BHC (Lindane)	1.99	2.05		ug/L		103	70 - 130
gamma-Chlordane	1.99	1.89		ug/L		95	70 - 130
Heptachlor	1.99	2.01		ug/L		101	70 - 130
Heptachlor epoxide (isomer B)	1.99	1.97		ug/L		99	70 - 130
Hexachlorobenzene	1.99	1.86		ug/L		93	70 - 130
Hexachlorocyclopentadiene	1.99	1.82		ug/L		92	70 - 130

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177756/22-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	1.99	1.92		ug/L		97	70 - 130
Isophorone	1.99	2.07		ug/L		104	70 - 130
Malathion	1.99	1.99		ug/L		100	70 - 130
Methoxychlor	1.99	2.20		ug/L		111	70 - 130
Metolachlor	1.99	2.04		ug/L		103	70 - 130
Molinate	1.99	2.14		ug/L		108	70 - 130
Naphthalene	1.99	2.01		ug/L		101	70 - 130
Parathion	1.99	1.94		ug/L		98	70 - 130
Pendimethalin (Penoxaline)	1.99	1.63		ug/L		82	70 - 130
Phenanthrene	1.99	2.04		ug/L		103	70 - 130
Propachlor	1.99	2.23		ug/L		112	70 - 130
Pyrene	1.99	1.93		ug/L		97	70 - 130
Simazine	1.99	1.99		ug/L		100	70 - 130
Terbacil	1.99	2.08		ug/L		105	70 - 130
Terbutylazine	1.99	2.04		ug/L		103	70 - 130
Thiobencarb	1.99	1.95		ug/L		98	70 - 130
trans-Nonachlor	1.99	1.94		ug/L		98	70 - 130
Trifluralin	1.99	1.73		ug/L		87	70 - 130
1-Methylnaphthalene	1.99	1.96		ug/L		99	70 - 130
2-Methylnaphthalene	1.99	2.00		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	104		70 - 130

**Lab Sample ID: MRL 380-177756/21-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.0991	0.0943	J	ug/L		95	50 - 150
2,4'-DDE	0.0991	0.0985	J	ug/L		99	50 - 150
2,4'-DDT	0.0991	0.108		ug/L		109	50 - 150
2,4-Dinitrotoluene	0.0991	0.113		ug/L		114	50 - 150
2,6-Dinitrotoluene	0.0991	0.129		ug/L		130	50 - 150
4,4'-DDD	0.0991	0.105		ug/L		106	50 - 150
4,4'-DDE	0.0991	0.0996		ug/L		100	50 - 150
4,4'-DDT	0.0991	0.114		ug/L		115	50 - 150
Acenaphthene	0.0991	0.0937	J	ug/L		95	50 - 150
Acenaphthylene	0.0991	0.0994		ug/L		100	50 - 150
Acetochlor	0.0991	0.115		ug/L		116	50 - 150
Alachlor	0.0496	0.0514		ug/L		104	50 - 150
alpha-BHC	0.0991	0.0976	J	ug/L		98	50 - 150
alpha-Chlordane	0.0248	0.0352	J	ug/L		142	50 - 150
Anthracene	0.0198	0.0241		ug/L		122	50 - 150
Atrazine	0.0496	0.0667		ug/L		135	50 - 150
Benz(a)anthracene	0.0496	0.0552		ug/L		111	50 - 150

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177756/21-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	0.0198	0.0224		ug/L		113	50 - 150
Benzo[b]fluoranthene	0.0198	0.0266		ug/L		134	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0603		ug/L		122	50 - 150
Benzo[k]fluoranthene	0.0198	0.0248		ug/L		125	50 - 150
beta-BHC	0.0991	0.108		ug/L		109	50 - 150
Bis(2-ethylhexyl) phthalate	0.595	0.591		ug/L		99	50 - 150
Aldrin	0.00991	0.0137		ug/L		138	50 - 150
Bromacil	0.0991	0.117		ug/L		118	50 - 150
Butachlor	0.0496	0.0687		ug/L		139	50 - 150
Butylbenzylphthalate	0.496	0.592		ug/L		119	50 - 150
Chlorobenzilate	0.0991	0.104		ug/L		104	50 - 150
Chloroneb	0.0991	0.102		ug/L		103	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0991	0.110		ug/L		111	50 - 150
Chlorpyrifos	0.0496	0.0529		ug/L		107	50 - 150
Chrysene	0.0198	0.0230		ug/L		116	50 - 150
delta-BHC	0.0991	0.0971	J	ug/L		98	50 - 150
Di(2-ethylhexyl)adipate	0.595	0.615		ug/L		104	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0646		ug/L		130	50 - 150
Diclorvos (DDVP)	0.0496	0.0609		ug/L		123	50 - 150
Dieldrin	0.00991	0.0116		ug/L		117	50 - 150
Diethylphthalate	0.496	0.558		ug/L		113	50 - 150
Dimethylphthalate	0.496	0.547		ug/L		110	50 - 150
Di-n-butyl phthalate	0.496	0.571	J	ug/L		115	49 - 243
Di-n-octyl phthalate	0.0991	0.0964	J	ug/L		97	50 - 150
Endosulfan I (Alpha)	0.0991	0.0861	J	ug/L		87	50 - 150
Endosulfan II (Beta)	0.0991	0.111		ug/L		112	50 - 150
Endosulfan sulfate	0.0991	0.110		ug/L		111	50 - 150
Endrin	0.00991	0.0138		ug/L		139	50 - 150
Endrin aldehyde	0.0991	0.114		ug/L		115	50 - 150
EPTC	0.0991	0.113		ug/L		114	50 - 150
Fluoranthene	0.0991	0.105		ug/L		106	50 - 150
Fluorene	0.0496	0.0545		ug/L		110	50 - 150
gamma-BHC (Lindane)	0.00991	0.0135		ug/L		136	50 - 150
gamma-Chlordane	0.0248	0.0353	J	ug/L		143	50 - 150
Heptachlor	0.00991	0.0133		ug/L		135	50 - 150
Heptachlor epoxide (isomer B)	0.00991	0.0136		ug/L		138	50 - 150
Hexachlorobenzene	0.0496	0.0505		ug/L		102	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0501		ug/L		101	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0733		ug/L		148	50 - 150
Isophorone	0.0991	0.129		ug/L		130	50 - 150
Malathion	0.0991	0.106		ug/L		107	50 - 150
Methoxychlor	0.0496	0.0702		ug/L		142	50 - 150
Metolachlor	0.0496	0.0616		ug/L		124	50 - 150
Molinate	0.0991	0.105		ug/L		106	50 - 150
Naphthalene	0.0991	0.113		ug/L		114	50 - 150
Parathion	0.0991	0.0963	J	ug/L		97	50 - 150
Pendimethalin (Penoxaline)	0.0991	0.0962	J	ug/L		97	50 - 150
Phenanthrene	0.0396	0.0440		ug/L		111	50 - 150
Propachlor	0.0496	0.0587		ug/L		118	50 - 150

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177756/21-A**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Pyrene	0.0496	0.0529		ug/L		107	50 - 150
Simazine	0.0496	0.0640		ug/L		129	50 - 150
Terbacil	0.0991	0.105		ug/L		106	50 - 150
Terbutylazine	0.0991	0.112		ug/L		113	50 - 150
Thiobencarb	0.0991	0.110		ug/L		111	50 - 150
trans-Nonachlor	0.0248	0.0367	J	ug/L		148	50 - 150
Trifluralin	0.0991	0.107		ug/L		108	50 - 150
1-Methylnaphthalene	0.0991	0.111		ug/L		112	50 - 150
2-Methylnaphthalene	0.0991	0.105		ug/L		106	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	100		70 - 130

**Lab Sample ID: 380-174230-V-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	<0.097		1.94	1.90		ug/L		98	70 - 130
2,4'-DDE	<0.097		1.94	1.99		ug/L		103	70 - 130
2,4'-DDT	<0.097		1.94	1.95		ug/L		101	70 - 130
2,4-Dinitrotoluene	<0.097		1.94	2.02		ug/L		104	70 - 130
2,6-Dinitrotoluene	<0.097		1.94	1.96		ug/L		101	70 - 130
4,4'-DDD	<0.097		1.94	1.93		ug/L		100	70 - 130
4,4'-DDE	<0.097		1.94	1.96		ug/L		101	70 - 130
4,4'-DDT	<0.097		1.94	1.88		ug/L		97	70 - 130
Acenaphthene	<0.097		1.94	1.94		ug/L		100	70 - 130
Acenaphthylene	<0.097		1.94	1.86		ug/L		96	70 - 130
Acetochlor	<0.097		1.94	2.03		ug/L		105	70 - 130
Alachlor	<0.048		1.94	2.16		ug/L		111	70 - 130
alpha-BHC	<0.097		1.94	1.96		ug/L		101	70 - 130
alpha-Chlordane	<0.048		1.94	1.90		ug/L		98	70 - 130
Anthracene	<0.019		1.94	1.44		ug/L		74	70 - 130
Atrazine	<0.048		1.94	1.96		ug/L		101	70 - 130
Benz(a)anthracene	<0.048		1.94	2.00		ug/L		103	70 - 130
Benzo[a]pyrene	<0.019		1.94	2.01		ug/L		104	70 - 130
Benzo[b]fluoranthene	<0.019		1.94	2.06		ug/L		106	70 - 130
Benzo[g,h,i]perylene	<0.048		1.94	1.95		ug/L		101	70 - 130
Benzo[k]fluoranthene	<0.019		1.94	2.04		ug/L		106	70 - 130
beta-BHC	<0.097		1.94	2.05		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.94	2.16		ug/L		111	70 - 130
Aldrin	<0.0097		1.94	1.70		ug/L		88	70 - 130
Bromacil	2.3		1.94	4.56		ug/L		116	70 - 130
Butachlor	<0.048		1.94	2.07		ug/L		107	70 - 130
Butylbenzylphthalate	<0.48		1.94	2.26		ug/L		117	70 - 130
Chlorobenzilate	<0.097		1.94	2.00		ug/L		103	70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174230-V-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chloroneb	<0.097		1.94	1.96		ug/L		101	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.94	1.90		ug/L		98	70 - 130
Chlorpyrifos	<0.048		1.94	1.98		ug/L		102	70 - 130
Chrysene	<0.019		1.94	1.98		ug/L		102	70 - 130
delta-BHC	<0.097		1.94	1.90		ug/L		98	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.94	2.09		ug/L		108	70 - 130
Dibenz(a,h)anthracene	<0.048		1.94	2.01		ug/L		104	70 - 130
Diclorvos (DDVP)	<0.048		1.94	2.04		ug/L		106	70 - 130
Dieldrin	<0.0097		1.94	1.89		ug/L		98	70 - 130
Diethylphthalate	<0.48		1.94	2.15		ug/L		111	70 - 130
Dimethylphthalate	<0.48		1.94	2.11		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.97		3.88	4.46		ug/L		115	70 - 130
Di-n-octyl phthalate	<0.097		1.94	1.97		ug/L		102	70 - 130
Endosulfan I (Alpha)	<0.097		1.94	1.88		ug/L		97	70 - 130
Endosulfan II (Beta)	<0.097		1.94	1.95		ug/L		101	70 - 130
Endosulfan sulfate	<0.097		1.94	1.99		ug/L		103	70 - 130
Endrin	<0.0097		1.94	1.94		ug/L		100	70 - 130
Endrin aldehyde	<0.097		1.94	1.76		ug/L		91	60 - 130
EPTC	<0.097		1.94	2.08		ug/L		107	70 - 130
Fluoranthene	<0.097		1.94	2.00		ug/L		103	70 - 130
Fluorene	<0.048		1.94	2.08		ug/L		107	70 - 130
gamma-BHC (Lindane)	<0.0097		1.94	2.05		ug/L		106	70 - 130
gamma-Chlordane	<0.048		1.94	1.82		ug/L		94	70 - 130
Heptachlor	<0.0097		1.94	2.01		ug/L		104	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.94	2.04		ug/L		105	70 - 130
Hexachlorobenzene	<0.048		1.94	1.86		ug/L		96	70 - 130
Hexachlorocyclopentadiene	<0.048		1.94	1.81		ug/L		93	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.94	2.02		ug/L		104	70 - 130
Isophorone	<0.097		1.94	1.95		ug/L		101	70 - 130
Malathion	<0.097		1.94	1.99		ug/L		103	70 - 130
Methoxychlor	<0.048		1.94	2.10		ug/L		109	70 - 130
Metolachlor	<0.048		1.94	2.02		ug/L		104	70 - 130
Molinate	<0.097		1.94	2.13		ug/L		110	70 - 130
Naphthalene	<0.097		1.94	1.92		ug/L		99	70 - 130
Parathion	<0.097		1.94	1.89		ug/L		98	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.94	1.91		ug/L		98	70 - 130
Phenanthrene	<0.039		1.94	1.94		ug/L		100	70 - 130
Propachlor	<0.048		1.94	2.21		ug/L		114	70 - 130
Pyrene	<0.048		1.94	1.88		ug/L		97	70 - 130
Simazine	<0.048		1.94	2.07		ug/L		107	70 - 130
Terbacil	<0.097		1.94	1.99		ug/L		103	70 - 130
Terbutylazine	<0.097		1.94	2.04		ug/L		105	70 - 130
Thiobencarb	<0.097		1.94	1.94		ug/L		100	70 - 130
trans-Nonachlor	<0.048		1.94	1.90		ug/L		98	70 - 130
Trifluralin	<0.097		1.94	1.93		ug/L		100	70 - 130
1-Methylnaphthalene	<0.097		1.94	1.89		ug/L		97	70 - 130
2-Methylnaphthalene	<0.097		1.94	1.89		ug/L		98	70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174230-V-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Surrogate	%Recovery	MS MS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	101		70 - 130
Triphenylphosphate	104		70 - 130

**Lab Sample ID: 380-174329-K-2-A DU**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
2,4'-DDD	<0.10		<0.099		ug/L		NC	20
2,4'-DDE	<0.10		<0.099		ug/L		NC	20
2,4'-DDT	<0.10		<0.099		ug/L		NC	20
2,4-Dinitrotoluene	<0.10		<0.099		ug/L		NC	20
2,6-Dinitrotoluene	<0.10		<0.099		ug/L		NC	20
4,4'-DDD	<0.10		<0.099		ug/L		NC	20
4,4'-DDE	<0.10		<0.099		ug/L		NC	20
4,4'-DDT	<0.10		<0.099		ug/L		NC	20
Acenaphthene	<0.10		<0.099		ug/L		NC	20
Acenaphthylene	<0.10		<0.099		ug/L		NC	20
Acetochlor	<0.10		<0.099		ug/L		NC	20
Alachlor	<0.050		<0.049		ug/L		NC	20
alpha-BHC	<0.10		<0.099		ug/L		NC	20
alpha-Chlordane	<0.050		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.050		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.050		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.050		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.10		<0.099		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.60		<0.59		ug/L		NC	20
Aldrin	<0.010		<0.0099		ug/L		NC	20
Bromacil	<0.10		<0.099		ug/L		NC	20
Butachlor	<0.050		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.50		<0.49		ug/L		NC	20
Chlorobenzilate	<0.10		<0.099		ug/L		NC	20
Chloroneb	<0.10		<0.099		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.10		<0.099		ug/L		NC	20
Chlorpyrifos	<0.050		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.10		<0.099		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.60		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.050		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.050		<0.049		ug/L		NC	20
Dieldrin	<0.010		<0.0099		ug/L		NC	20
Diethylphthalate	<0.50		<0.49		ug/L		NC	20
Dimethylphthalate	<0.50		<0.49		ug/L		NC	20

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174329-K-2-A DU**  
**Matrix: Water**  
**Analysis Batch: 177978**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 177756**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Di-n-butyl phthalate	<1.0		<0.99		ug/L		NC	20
Di-n-octyl phthalate	<0.10		<0.099		ug/L		NC	20
Endosulfan I (Alpha)	<0.10		<0.099		ug/L		NC	20
Endosulfan II (Beta)	<0.10		<0.099		ug/L		NC	20
Endosulfan sulfate	<0.10		<0.099		ug/L		NC	20
Endrin	<0.010		<0.0099		ug/L		NC	20
Endrin aldehyde	<0.10		<0.099		ug/L		NC	20
EPTC	<0.10		<0.099		ug/L		NC	20
Fluoranthene	<0.10		<0.099		ug/L		NC	20
Fluorene	<0.050		<0.049		ug/L		NC	20
gamma-BHC (Lindane)	<0.010		<0.0099		ug/L		NC	20
gamma-Chlordane	<0.050		<0.049		ug/L		NC	20
Heptachlor	<0.010		<0.0099		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.010		<0.0099		ug/L		NC	20
Hexachlorobenzene	<0.050		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.050		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.050		<0.049		ug/L		NC	20
Isophorone	<0.10		<0.099		ug/L		NC	20
Malathion	<0.10		<0.099		ug/L		NC	20
Methoxychlor	<0.050		<0.049		ug/L		NC	20
Metolachlor	<0.050		<0.049		ug/L		NC	20
Molinate	<0.10		<0.099		ug/L		NC	20
Naphthalene	<0.10		<0.099		ug/L		NC	20
Parathion	<0.10		<0.099		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.10		<0.099		ug/L		NC	20
Phenanthrene	<0.040		<0.039		ug/L		NC	20
Propachlor	<0.050		<0.049		ug/L		NC	20
Pyrene	<0.050		<0.049		ug/L		NC	20
Simazine	<0.050		<0.049		ug/L		NC	20
Terbacil	<0.10		<0.099		ug/L		NC	20
Terbutylazine	<0.10		<0.099		ug/L		NC	20
Thiobencarb	<0.10		<0.099		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.050		<0.049		ug/L		NC	20
Trifluralin	<0.10		<0.099		ug/L		NC	20
1-Methylnaphthalene	<0.10		<0.099		ug/L		NC	20
2-Methylnaphthalene	<0.10		<0.099		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	102		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	105		70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 570-636448/1-A**  
**Matrix: Water**  
**Analysis Batch: 643083**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

<i>Tentatively Identified Compound</i>	<i>MB</i>	<i>MB</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>	<i>Qualifier</i>	<i>ug/L</i>			<i>N/A</i>	<i>10/07/25 05:00</i>	<i>10/20/25 09:12</i>	<i>1</i>
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol (Surr)	68		33 - 139				10/07/25 05:00	10/20/25 09:12	1
2-Fluorobiphenyl (Surr)	92		33 - 126				10/07/25 05:00	10/20/25 09:12	1
2-Fluorophenol (Surr)	53		12 - 120				10/07/25 05:00	10/20/25 09:12	1
Nitrobenzene-d5 (Surr)	96		36 - 120				10/07/25 05:00	10/20/25 09:12	1
Phenol-d6 (Surr)	35		10 - 120				10/07/25 05:00	10/20/25 09:12	1
p-Terphenyl-d14 (Surr)	97		47 - 131				10/07/25 05:00	10/20/25 09:12	1

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

**Lab Sample ID: MB 570-636448/1-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

<b>Analyte</b>	<b>MB</b>	<b>MB</b>	<b>RL</b>	<b>Unit</b>	<b>D</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
	<b>Result</b>	<b>Qualifier</b>						
1-Methylnaphthalene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
2,4,5-Trichlorophenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2,4,6-Trichlorophenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2,4-Dichlorophenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2,4-Dinitrophenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2,6-Dichlorophenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Chloronaphthalene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Chlorophenol	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Methylphenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Nitroaniline	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
2-Nitrophenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
3/4-Methylphenol	<2.0		2.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
3-Nitroaniline	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
4,6-Dinitro-2-methylphenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Bromophenyl phenyl ether	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Chloro-3-methylphenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Chloroaniline	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Chlorophenyl phenyl ether	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Nitroaniline	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
4-Nitrophenol	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
Acenaphthene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Acenaphthylene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Aniline	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Anthracene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzidine	<5.0		5.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1

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# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MB 570-636448/1-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzoic acid	<10		10	ug/L		10/07/25 05:00	10/12/25 06:45	1
Benzyl alcohol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
Bis(2-chloroethoxy)methane	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Bis(2-chloroethyl)ether	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
bis (2-Chloroisopropyl) ether	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Chrysene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Dibenzofuran	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Fluoranthene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Fluorene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Hexachloroethane	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Naphthalene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Nitrobenzene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
N-Nitrosodi-n-propylamine	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
N-Nitrosodiphenylamine	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Pentachlorophenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
Phenanthrene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1
Phenol	<1.0		1.0	ug/L		10/07/25 05:00	10/12/25 06:45	1
Pyrene	<0.20		0.20	ug/L		10/07/25 05:00	10/12/25 06:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	89		28 - 127	10/07/25 05:00	10/12/25 06:45	1
2-Fluorobiphenyl (Surr)	88		31 - 120	10/07/25 05:00	10/12/25 06:45	1
2-Fluorophenol (Surr)	55		17 - 120	10/07/25 05:00	10/12/25 06:45	1
Nitrobenzene-d5 (Surr)	95		27 - 120	10/07/25 05:00	10/12/25 06:45	1
Phenol-d6 (Surr)	35		10 - 120	10/07/25 05:00	10/12/25 06:45	1
p-Terphenyl-d14 (Surr)	91		45 - 120	10/07/25 05:00	10/12/25 06:45	1

**Lab Sample ID: LCS 570-636448/2-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	15.2		ug/L		76	47 - 120
2,4,5-Trichlorophenol	20.0	20.4		ug/L		102	57 - 120
2,4,6-Trichlorophenol	20.0	19.1		ug/L		95	52 - 129
2,4-Dichlorophenol	20.0	15.8		ug/L		79	53 - 122
2,4-Dinitrophenol	20.0	19.8		ug/L		99	1 - 173
2,6-Dichlorophenol	20.0	15.6		ug/L		78	50 - 120
2-Chloronaphthalene	20.0	18.5		ug/L		92	65 - 120
2-Chlorophenol	20.0	18.7		ug/L		94	36 - 120
2-Methylnaphthalene	20.0	15.0		ug/L		75	43 - 120
2-Methylphenol	20.0	17.5		ug/L		87	46 - 120
2-Nitroaniline	20.0	19.1		ug/L		96	51 - 125
2-Nitrophenol	20.0	15.6		ug/L		78	45 - 167
3/4-Methylphenol	40.0	31.9		ug/L		80	29 - 120
3-Nitroaniline	20.0	19.0		ug/L		95	62 - 129

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 570-636448/2-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,6-Dinitro-2-methylphenol	20.0	20.0		ug/L		100	53 - 130
4-Bromophenyl phenyl ether	20.0	16.7		ug/L		83	65 - 120
4-Chloro-3-methylphenol	20.0	15.7		ug/L		79	41 - 128
4-Chloroaniline	20.0	10.1	*-	ug/L		50	51 - 120
4-Chlorophenyl phenyl ether	20.0	18.0		ug/L		90	38 - 145
4-Nitroaniline	20.0	17.3		ug/L		86	64 - 129
4-Nitrophenol	20.0	9.32		ug/L		47	13 - 129
Acenaphthene	20.0	17.7		ug/L		89	60 - 132
Acenaphthylene	20.0	17.9		ug/L		90	54 - 126
Aniline	20.0	3.55	*-	ug/L		18	52 - 121
Anthracene	20.0	17.6		ug/L		88	43 - 120
Benzidine	20.0	<0.94	*-	ug/L		0.8	20 - 164
Benzo[a]anthracene	20.0	17.8		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	18.3		ug/L		91	32 - 148
Benzo[b]fluoranthene	20.0	18.0		ug/L		90	42 - 140
Benzo[g,h,i]perylene	20.0	17.5		ug/L		87	1 - 195
Benzo[k]fluoranthene	20.0	18.0		ug/L		90	25 - 146
Benzoic acid	20.0	9.63	J	ug/L		48	20 - 120
Benzyl alcohol	20.0	16.4		ug/L		82	44 - 122
Bis(2-chloroethoxy)methane	20.0	15.8		ug/L		79	49 - 165
Bis(2-chloroethyl)ether	20.0	19.0		ug/L		95	43 - 126
bis (2-Chloroisopropyl) ether	20.0	19.8		ug/L		99	63 - 139
Chrysene	20.0	18.1		ug/L		90	44 - 140
Dibenz(a,h)anthracene	20.0	18.3		ug/L		91	1 - 200
Dibenzofuran	20.0	18.0		ug/L		90	48 - 120
Fluoranthene	20.0	18.5		ug/L		93	43 - 121
Fluorene	20.0	18.1		ug/L		90	70 - 120
Hexachloroethane	20.0	17.1		ug/L		85	55 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.7		ug/L		89	1 - 151
Naphthalene	20.0	14.5		ug/L		73	36 - 120
Nitrobenzene	20.0	15.9		ug/L		79	54 - 158
N-Nitrosodi-n-propylamine	20.0	18.0		ug/L		90	14 - 198
N-Nitrosodiphenylamine	20.0	19.9		ug/L		100	65 - 133
Pentachlorophenol	20.0	18.4		ug/L		92	38 - 152
Phenanthrene	20.0	17.7		ug/L		89	65 - 120
Phenol	20.0	9.24		ug/L		46	17 - 120
Pyrene	20.0	18.7		ug/L		94	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	93		28 - 127
2-Fluorobiphenyl (Surr)	89		31 - 120
2-Fluorophenol (Surr)	66		17 - 120
Nitrobenzene-d5 (Surr)	81		27 - 120
Phenol-d6 (Surr)	44		10 - 120
p-Terphenyl-d14 (Surr)	93		45 - 120

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 570-636448/3-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD
									Limit
1-Methylnaphthalene	20.0	2.52	*- *1	ug/L		13	47 - 120	143	20
2,4,5-Trichlorophenol	20.0	2.24	J *- *1	ug/L		11	57 - 120	160	20
2,4,6-Trichlorophenol	20.0	2.51	*- *1	ug/L		13	52 - 129	153	35
2,4-Dichlorophenol	20.0	2.54	*- *1	ug/L		13	53 - 122	145	30
2,4-Dinitrophenol	20.0	<2.6	*- *1	ug/L		0	1 - 173	200	79
2,6-Dichlorophenol	20.0	2.61	J *- *1	ug/L		13	50 - 120	143	20
2-Chloronaphthalene	20.0	2.58	*- *1	ug/L		13	65 - 120	151	15
2-Chlorophenol	20.0	2.56	*- *1	ug/L		13	36 - 120	152	37
2-Methylnaphthalene	20.0	2.49	*- *1	ug/L		12	43 - 120	143	20
2-Methylphenol	20.0	2.47	*- *1	ug/L		12	46 - 120	150	20
2-Nitroaniline	20.0	2.38	J *- *1	ug/L		12	51 - 125	156	20
2-Nitrophenol	20.0	2.61	J *- *1	ug/L		13	45 - 167	143	33
3/4-Methylphenol	40.0	4.31	*- *1	ug/L		11	29 - 120	152	20
3-Nitroaniline	20.0	1.71	J *- *1	ug/L		9	62 - 129	167	20
4,6-Dinitro-2-methylphenol	20.0	3.71	J *- *1	ug/L		19	53 - 130	138	122
4-Bromophenyl phenyl ether	20.0	2.47	*- *1	ug/L		12	65 - 120	148	26
4-Chloro-3-methylphenol	20.0	2.37	*- *1	ug/L		12	41 - 128	148	44
4-Chloroaniline	20.0	1.15	J *- *1	ug/L		6	51 - 120	159	20
4-Chlorophenyl phenyl ether	20.0	2.62	*- *1	ug/L		13	38 - 145	149	36
4-Nitroaniline	20.0	1.02	J *- *1	ug/L		5	64 - 129	178	20
4-Nitrophenol	20.0	<0.79	*- *1	ug/L		0	13 - 129	200	79
Acenaphthene	20.0	2.58	*- *1	ug/L		13	60 - 132	149	29
Acenaphthylene	20.0	2.62	*- *1	ug/L		13	54 - 126	149	45
Aniline	20.0	0.204	*- *1	ug/L		1	52 - 121	178	21
Anthracene	20.0	2.84	*- *1	ug/L		14	43 - 120	145	40
Benzidine	20.0	<0.94	*- *1	ug/L		0	20 - 164	200	30
Benzo[a]anthracene	20.0	2.50	*- *1	ug/L		12	42 - 133	151	32
Benzo[a]pyrene	20.0	2.62	*- *1	ug/L		13	32 - 148	150	43
Benzo[b]fluoranthene	20.0	2.41	*- *1	ug/L		12	42 - 140	153	43
Benzo[g,h,i]perylene	20.0	2.42	*1	ug/L		12	1 - 195	151	61
Benzo[k]fluoranthene	20.0	2.70	*- *1	ug/L		13	25 - 146	148	38
Benzoic acid	20.0	<3.9	*- *1	ug/L		0	20 - 120	200	30
Benzyl alcohol	20.0	1.90	*- *1	ug/L		9	44 - 122	159	20
Bis(2-chloroethoxy)methane	20.0	2.77	*- *1	ug/L		14	49 - 165	140	32
Bis(2-chloroethyl)ether	20.0	2.61	*- *1	ug/L		13	43 - 126	152	65
bis (2-Chloroisopropyl) ether	20.0	2.90	*- *1	ug/L		15	63 - 139	149	46
Chrysene	20.0	2.77	*- *1	ug/L		14	44 - 140	147	53
Dibenz(a,h)anthracene	20.0	2.42	*1	ug/L		12	1 - 200	153	75
Dibenzofuran	20.0	2.55	*- *1	ug/L		13	48 - 120	150	20
Fluoranthene	20.0	2.75	*- *1	ug/L		14	43 - 121	148	40
Fluorene	20.0	2.64	*- *1	ug/L		13	70 - 120	149	23
Hexachloroethane	20.0	2.48	*- *1	ug/L		12	55 - 120	149	32
Indeno[1,2,3-cd]pyrene	20.0	2.23	*1	ug/L		11	1 - 151	155	60
Naphthalene	20.0	2.52	*- *1	ug/L		13	36 - 120	141	39
Nitrobenzene	20.0	2.73	*- *1	ug/L		14	54 - 158	141	37
N-Nitrosodi-n-propylamine	20.0	2.76	*1	ug/L		14	14 - 198	147	52
N-Nitrosodiphenylamine	20.0	2.96	*- *1	ug/L		15	65 - 133	148	20
Pentachlorophenol	20.0	2.20	*- *1	ug/L		11	38 - 152	157	52

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCSD 570-636448/3-A**  
**Matrix: Water**  
**Analysis Batch: 639157**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 636448**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	2.57	*- *1	ug/L		13	65 - 120	149	24
Phenol	20.0	1.22	*- *1	ug/L		6	17 - 120	153	39
Pyrene	20.0	2.80	*- *1	ug/L		14	70 - 120	148	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	13	S1-	28 - 127
2-Fluorobiphenyl (Surr)	13	S1-	31 - 120
2-Fluorophenol (Surr)	8	S1-	17 - 120
Nitrobenzene-d5 (Surr)	13	S1-	27 - 120
Phenol-d6 (Surr)	6	S1-	10 - 120
p-Terphenyl-d14 (Surr)	13	S1-	45 - 120

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

**Lab Sample ID: MB 570-636604/6**  
**Matrix: Water**  
**Analysis Batch: 636604**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			10/07/25 11:35	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		38 - 134		10/07/25 11:35	1

**Lab Sample ID: LCS 570-636604/4**  
**Matrix: Water**  
**Analysis Batch: 636604**

**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	414		ug/L		103	78 - 120

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

**Lab Sample ID: LCSD 570-636604/5**  
**Matrix: Water**  
**Analysis Batch: 636604**

**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	407		ug/L		102	78 - 120	2	10

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	97		38 - 134

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 570-636604/3**  
**Matrix: Water**  
**Analysis Batch: 636604**

**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	8.80	J	ug/L		88	50 - 150
<b>Surrogate</b>		<b>MRL %Recovery</b>	<b>MRL Qualifier</b>				<b>Limits</b>
4-Bromofluorobenzene (Surr)		93					38 - 134

**Lab Sample ID: 380-173600-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 636604**

**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	390		ug/L		97	68 - 122
<b>Surrogate</b>		<b>MS %Recovery</b>		<b>MS Qualifier</b>					<b>Limits</b>
4-Bromofluorobenzene (Surr)		95							38 - 134

**Lab Sample ID: 380-173600-B-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 636604**

**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	389		ug/L		97	68 - 122	0	18
<b>Surrogate</b>		<b>MSD %Recovery</b>		<b>MSD Qualifier</b>					<b>Limits</b>		
4-Bromofluorobenzene (Surr)		99							38 - 134		

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

**Lab Sample ID: MBL 380-177809/4-A**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0040		0.020	ug/L		10/03/25 15:21	10/03/25 18:53	1
1,2-Dibromo-3-Chloropropane	<0.0020		0.010	ug/L		10/03/25 15:21	10/03/25 18:53	1
1,2-Dibromoethane	<0.0040		0.010	ug/L		10/03/25 15:21	10/03/25 18:53	1
<b>Surrogate</b>		<b>MBL %Recovery</b>	<b>MBL Qualifier</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dibromopropane (Surr)		94				10/03/25 15:21	10/03/25 18:53	1

**Lab Sample ID: LCS 380-177809/29-A**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.200	0.217		ug/L		109	70 - 130

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177809/29-A**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.200	0.200		ug/L		100	70 - 130
1,2-Dibromoethane	0.200	0.204		ug/L		102	70 - 130
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
1,2-Dibromopropane (Surr)	100		60 - 140				

**Lab Sample ID: MRL 380-177809/2-A**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.0200	0.0224		ug/L		112	60 - 140
<b>Surrogate</b>	<b>MRL %Recovery</b>	<b>MRL Qualifier</b>	<b>Limits</b>				
1,2-Dibromopropane (Surr)	96		60 - 140				

**Lab Sample ID: MRL 380-177809/3-A**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	0.0500	0.0507		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	0.0100	0.00980	J	ug/L		98	60 - 140
1,2-Dibromoethane	0.0100	0.0106		ug/L		106	60 - 140
<b>Surrogate</b>	<b>MRL %Recovery</b>	<b>MRL Qualifier</b>	<b>Limits</b>				
1,2-Dibromopropane (Surr)	91		60 - 140				

**Lab Sample ID: 380-173719-BJ-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	<0.020		1.25	1.25		ug/L		100	65 - 135
1,2-Dibromo-3-Chloropropane	<0.010		0.251	0.253		ug/L		101	65 - 135
1,2-Dibromoethane	<0.010		0.251	0.243		ug/L		97	65 - 135
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
1,2-Dibromopropane (Surr)	102		60 - 140						

**Lab Sample ID: 380-173871-BO-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 177937**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 177809**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1,2,3-Trichloropropane	<0.020		<0.019		ug/L		NC	20
1,2-Dibromo-3-Chloropropane	<0.0099		<0.0097		ug/L		NC	20
1,2-Dibromoethane	<0.0099		<0.0097		ug/L		NC	20

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

Surrogate	DU DU		Limits
	%Recovery	Qualifier	
1,2-Dibromopropane (Surr)	102		60 - 140

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

Lab Sample ID: MB 380-177969/32-A  
Matrix: Water  
Analysis Batch: 178184

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 177969

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Toxaphene	<0.50		0.50	ug/L		10/06/25 12:58	10/07/25 00:50	1
Chlordane (n.o.s.)	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1016	<0.070		0.070	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1221	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1232	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1242	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1248	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1254	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1
PCB-1260	<0.070		0.070	ug/L		10/06/25 12:58	10/07/25 00:50	1
Polychlorinated biphenyls, Total	<0.10		0.10	ug/L		10/06/25 12:58	10/07/25 00:50	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	95		70 - 130	10/06/25 12:58	10/07/25 00:50	1

Lab Sample ID: LCS 380-177969/16-A  
Matrix: Water  
Analysis Batch: 178184

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 177969

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

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

Lab Sample ID: LCS 380-177969/24-A  
Matrix: Water  
Analysis Batch: 178184

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 177969

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	111		70 - 130

Lab Sample ID: LCS 380-177969/57-A  
Matrix: Water  
Analysis Batch: 178184

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 177969

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

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177969/57-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> Tetrachloro-m-xylene	97		70 - 130

**Lab Sample ID: LCS 380-177969/59-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Chlordane (n.o.s.)	0.500	0.484		ug/L		97	70 - 130	

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> Tetrachloro-m-xylene	103		70 - 130

**Lab Sample ID: LCS 380-177969/60-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
PCB-1221	0.500	0.481		ug/L		96	70 - 130	

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> Tetrachloro-m-xylene	97		70 - 130

**Lab Sample ID: LCS 380-177969/8-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Toxaphene	2.50	2.56		ug/L		102	70 - 130	

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> Tetrachloro-m-xylene	99		70 - 130

**Lab Sample ID: LCSD 380-177969/58-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits		RPD	Limit
Toxaphene	2.50	2.68		ug/L		107	70 - 130	2	20	

	LCSD %Recovery	LCSD Qualifier	Limits
<i>Surrogate</i> Tetrachloro-m-xylene	98		70 - 130

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 380-177969/30-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	0.500	0.543		ug/L		109	50 - 150
<b>Surrogate</b>	<b>MRL %Recovery</b>	<b>MRL Qualifier</b>	<b>Limits</b>				
<i>Tetrachloro-m-xylene</i>	104		70 - 130				

**Lab Sample ID: MRL 380-177969/31-A**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	0.100	0.0952	J	ug/L		95	50 - 150
<b>Surrogate</b>	<b>MRL %Recovery</b>	<b>MRL Qualifier</b>	<b>Limits</b>				
<i>Tetrachloro-m-xylene</i>	97		70 - 130				

**Lab Sample ID: 380-174568-F-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.50		2.49	2.44		ug/L		98	65 - 135
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
<i>Tetrachloro-m-xylene</i>	96		70 - 130						

**Lab Sample ID: 380-174568-G-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	<0.10		0.501	0.508		ug/L		101	65 - 135
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
<i>Tetrachloro-m-xylene</i>	105		70 - 130						

**Lab Sample ID: 380-174708-E-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	<0.51		2.53	2.59		ug/L		102	65 - 135
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
<i>Tetrachloro-m-xylene</i>	98		70 - 130						

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174708-F-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 178184**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 177969**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (n.o.s.)	<0.10		0.510	0.507		ug/L		99	65 - 135
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>MS Limits</b>						
<i>Tetrachloro-m-xylene</i>	110		70 - 130						

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

**Lab Sample ID: MB 570-636670/1-A**  
**Matrix: Water**  
**Analysis Batch: 639324**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 636670**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		10/07/25 09:55	10/13/25 02:39	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/07/25 09:55	10/13/25 02:39	1
C8-C18	<25		25	ug/L		10/07/25 09:55	10/13/25 02:39	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>MB Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>n-Octacosane (Surr)</i>	99		60 - 130			10/07/25 09:55	10/13/25 02:39	1

**Lab Sample ID: LCS 570-636670/2-A**  
**Matrix: Water**  
**Analysis Batch: 639324**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 636670**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1680		ug/L		105	56 - 127
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>LCS Limits</b>				
<i>n-Octacosane (Surr)</i>	94		60 - 130				

**Lab Sample ID: LCSD 570-636670/3-A**  
**Matrix: Water**  
**Analysis Batch: 639324**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 636670**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1920		ug/L		120	56 - 127	13	23
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>LCSD Limits</b>						
<i>n-Octacosane (Surr)</i>	102		60 - 130						

**Lab Sample ID: MRL 570-636670/4-A**  
**Matrix: Water**  
**Analysis Batch: 639324**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 636670**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	0.0296		mg/L		148	50 - 150

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MRL 570-636670/4-A**  
**Matrix: Water**  
**Analysis Batch: 639324**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 636670**

Surrogate	MRL %Recovery	MRL Qualifier	Limits
<i>n</i> -Octacosane (Surr)	104		60 - 130

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

**Lab Sample ID: MB 570-637626/3**  
**Matrix: Water**  
**Analysis Batch: 637626**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	<0.10		0.10	mg/L			10/08/25 20:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Hexafluoro-2-propanol (Surr)	86		54 - 120		10/08/25 20:21	1

**Lab Sample ID: LCS 570-637626/5**  
**Matrix: Water**  
**Analysis Batch: 637626**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	2.00	1.87		mg/L		94	78 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Hexafluoro-2-propanol (Surr)	91		54 - 120

**Lab Sample ID: LCSD 570-637626/6**  
**Matrix: Water**  
**Analysis Batch: 637626**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethanol	2.00	1.90		mg/L		95	78 - 131	4	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Hexafluoro-2-propanol (Surr)	83		54 - 120

**Lab Sample ID: MRL 570-637626/4**  
**Matrix: Water**  
**Analysis Batch: 637626**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Ethanol	0.100	0.101		mg/L		101	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Hexafluoro-2-propanol (Surr)	102		54 - 120

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 570-249246-A-1 MS**  
**Matrix: Water**  
**Analysis Batch: 637626**

**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	2.29		mg/L		114	20 - 173	
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>MS Limits</b>							
Hexafluoro-2-propanol (Surr)	87		54 - 120							

**Lab Sample ID: 570-249246-A-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 637626**

**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	2.07		mg/L		104	20 - 173	6	21
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>MSD Limits</b>								
Hexafluoro-2-propanol (Surr)	92	p	54 - 120								

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 380-177602/40**  
**Matrix: Water**  
**Analysis Batch: 177602**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.050		0.050	mg/L			10/02/25 20:47	1
Nitrite as N	<0.050		0.050	mg/L			10/02/25 20:47	1

**Lab Sample ID: LCS 380-177602/42**  
**Matrix: Water**  
**Analysis Batch: 177602**

**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	2.53		mg/L		101	90 - 110
Nitrite as N	1.00	1.04		mg/L		104	90 - 110

**Lab Sample ID: LCSD 380-177602/43**  
**Matrix: Water**  
**Analysis Batch: 177602**

**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	2.54		mg/L		101	90 - 110	0	20
Nitrite as N	1.00	1.04		mg/L		104	90 - 110	0	20

**Lab Sample ID: MRL 380-177602/46**  
**Matrix: Water**  
**Analysis Batch: 177602**

**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	0.0487	J	mg/L		97	50 - 150
Nitrite as N	0.0500	0.0535		mg/L		107	50 - 150

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174496-C-6 MS**  
**Matrix: Water**  
**Analysis Batch: 177602**

**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	1.31		mg/L		105	80 - 120
Nitrite as N	<0.050		0.500	0.551		mg/L		110	80 - 120

**Lab Sample ID: 380-174496-C-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 177602**

**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	1.26		mg/L		101	80 - 120	4	20
Nitrite as N	<0.050		0.500	0.540		mg/L		108	80 - 120	2	20

**Lab Sample ID: MB 380-177603/40**  
**Matrix: Water**  
**Analysis Batch: 177603**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.50		0.50	mg/L			10/02/25 20:47	1
Sulfate	<0.25		0.25	mg/L			10/02/25 20:47	1

**Lab Sample ID: LCS 380-177603/42**  
**Matrix: Water**  
**Analysis Batch: 177603**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	24.8		mg/L		99	90 - 110
Sulfate	50.0	50.5		mg/L		101	90 - 110

**Lab Sample ID: LCSD 380-177603/43**  
**Matrix: Water**  
**Analysis Batch: 177603**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0	24.8		mg/L		99	90 - 110	0	20
Sulfate	50.0	50.8		mg/L		102	90 - 110	1	20

**Lab Sample ID: MRL 380-177603/46**  
**Matrix: Water**  
**Analysis Batch: 177603**

**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	0.447	J	mg/L		89	50 - 150
Sulfate	0.250	0.270		mg/L		108	50 - 150

**Lab Sample ID: 380-174496-C-6 MS**  
**Matrix: Water**  
**Analysis Batch: 177603**

**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	<0.50		12.5	12.5		mg/L		100	80 - 120
Sulfate	<0.25		25.0	26.3		mg/L		105	80 - 120

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: 380-174496-C-6 MSD**  
**Matrix: Water**  
**Analysis Batch: 177603**

**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	<0.50		12.5	12.1		mg/L		97	80 - 120	3	20
Sulfate	<0.25		25.0	25.6		mg/L		102	80 - 120	3	20

**Lab Sample ID: MB 380-177853/4**  
**Matrix: Water**  
**Analysis Batch: 177853**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	<0.050		0.050	mg/L			10/03/25 10:19	1
Nitrite as N	<0.050		0.050	mg/L			10/03/25 10:19	1

**Lab Sample ID: LCS 380-177853/6**  
**Matrix: Water**  
**Analysis Batch: 177853**

**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	2.58		mg/L		103	90 - 110
Nitrite as N	1.00	1.03		mg/L		103	90 - 110

**Lab Sample ID: LCSD 380-177853/7**  
**Matrix: Water**  
**Analysis Batch: 177853**

**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	2.58		mg/L		103	90 - 110	0	20
Nitrite as N	1.00	1.03		mg/L		103	90 - 110	0	20

**Lab Sample ID: MRL 380-177853/5**  
**Matrix: Water**  
**Analysis Batch: 177853**

**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	0.0483	J	mg/L		97	50 - 150
Nitrite as N	0.0500	0.0557		mg/L		111	50 - 150

**Lab Sample ID: 380-174500-A-2 MS**  
**Matrix: Water**  
**Analysis Batch: 177853**

**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	1.2		6.25	7.12		mg/L		94	80 - 120
Nitrite as N	<0.25		2.50	2.16		mg/L		86	80 - 120

**Lab Sample ID: 380-174500-A-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 177853**

**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	1.2		6.25	7.11		mg/L		94	80 - 120	0	20
Nitrite as N	<0.25		2.50	2.15		mg/L		86	80 - 120	0	20

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID: MB 380-177854/4**  
**Matrix: Water**  
**Analysis Batch: 177854**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.50		0.50	mg/L			10/03/25 10:19	1
Sulfate	<0.25		0.25	mg/L			10/03/25 10:19	1

**Lab Sample ID: LCS 380-177854/6**  
**Matrix: Water**  
**Analysis Batch: 177854**

**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	25.1		mg/L		100	90 - 110
Sulfate	50.0	51.1		mg/L		102	90 - 110

**Lab Sample ID: LCSD 380-177854/7**  
**Matrix: Water**  
**Analysis Batch: 177854**

**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	25.1		mg/L		100	90 - 110	0	20
Sulfate	50.0	51.2		mg/L		102	90 - 110	0	20

**Lab Sample ID: MRL 380-177854/5**  
**Matrix: Water**  
**Analysis Batch: 177854**

**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	0.450	J	mg/L		90	50 - 150
Sulfate	0.250	0.262		mg/L		105	50 - 150

**Lab Sample ID: 380-174500-A-2 MS**  
**Matrix: Water**  
**Analysis Batch: 177854**

**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	320	E	62.5	358	E 4	mg/L		60	80 - 120
Sulfate	130		125	257		mg/L		105	80 - 120

**Lab Sample ID: 380-174500-A-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 177854**

**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	320	E	62.5	357	E 4	mg/L		58	80 - 120	0	20
Sulfate	130		125	256		mg/L		104	80 - 120	0	20

**Lab Sample ID: MB 380-177913/6**  
**Matrix: Water**  
**Analysis Batch: 177913**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	<5.0		5.0	ug/L			10/03/25 17:16	1

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177913/7**  
**Matrix: Water**  
**Analysis Batch: 177913**

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

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

**Lab Sample ID: LCSD 380-177913/8**  
**Matrix: Water**  
**Analysis Batch: 177913**

**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	97.8		ug/L		98	90 - 110	0	10

**Lab Sample ID: MRL 380-177913/5**  
**Matrix: Water**  
**Analysis Batch: 177913**

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.00	5.02		ug/L		100	75 - 125

**Lab Sample ID: 380-173871-BH-1 MS**  
**Matrix: Water**  
**Analysis Batch: 177913**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	<5.0		50.0	50.3		ug/L		101	80 - 120

**Lab Sample ID: 380-173871-BH-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 177913**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	<5.0		50.0	50.9		ug/L		102	80 - 120	1	20

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

**Lab Sample ID: MBL 380-177975/149**  
**Matrix: Water**  
**Analysis Batch: 177975**

**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			10/03/25 15:46	1
Magnesium	<0.0099		0.10	mg/L			10/03/25 15:46	1
Potassium	<0.044		0.10	mg/L			10/03/25 15:46	1
Sodium	<0.019		0.10	mg/L			10/03/25 15:46	1

**Lab Sample ID: LCS 380-177975/151**  
**Matrix: Water**  
**Analysis Batch: 177975**

**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	50.7		mg/L		101	85 - 115
Magnesium	20.0	20.8		mg/L		104	85 - 115
Potassium	20.0	20.4		mg/L		102	85 - 115

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177975/151**  
**Matrix: Water**  
**Analysis Batch: 177975**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sodium	50.0	50.8		mg/L		102	85 - 115

**Lab Sample ID: LCSD 380-177975/152**  
**Matrix: Water**  
**Analysis Batch: 177975**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	50.0	50.4		mg/L		101	85 - 115	0	20
Magnesium	20.0	20.7		mg/L		103	85 - 115	0	20
Potassium	20.0	20.3		mg/L		101	85 - 115	0	20
Sodium	50.0	50.7		mg/L		101	85 - 115	0	20

**Lab Sample ID: LLCS 380-177975/150**  
**Matrix: Water**  
**Analysis Batch: 177975**

**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	0.0981	J	mg/L		98	50 - 150
Magnesium	0.100	0.106		mg/L		106	50 - 150
Potassium	0.100	0.100		mg/L		100	50 - 150
Sodium	0.100	0.108		mg/L		108	50 - 150

**Lab Sample ID: 380-174491-A-3 MS**  
**Matrix: Water**  
**Analysis Batch: 177975**

**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	7.8		50.0	61.2		mg/L		107	70 - 130
Magnesium	1.4		20.0	23.4		mg/L		110	70 - 130
Potassium	0.63		20.0	22.2		mg/L		108	70 - 130
Sodium	11		50.0	65.0		mg/L		107	70 - 130

**Lab Sample ID: 380-174491-A-3 MSD**  
**Matrix: Water**  
**Analysis Batch: 177975**

**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	7.8		50.0	57.4		mg/L		99	70 - 130	6	20
Magnesium	1.4		20.0	21.9		mg/L		103	70 - 130	6	20
Potassium	0.63		20.0	20.7		mg/L		100	70 - 130	7	20
Sodium	11		50.0	60.8		mg/L		99	70 - 130	7	20

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

**Lab Sample ID: MBL 380-177970/49**  
**Matrix: Water**  
**Analysis Batch: 177970**

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.48		1.0	ug/L			10/03/25 13:42	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MBL 380-177970/49**  
**Matrix: Water**  
**Analysis Batch: 177970**

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.25		1.0	ug/L			10/03/25 13:42	1
Beryllium	<0.12		0.30	ug/L			10/03/25 13:42	1
Cadmium	<0.081		0.50	ug/L			10/03/25 13:42	1
Chromium	<0.33		0.90	ug/L			10/03/25 13:42	1
Copper	<0.28		1.0	ug/L			10/03/25 13:42	1
Lead	<0.084		0.50	ug/L			10/03/25 13:42	1
Nickel	<0.38		1.0	ug/L			10/03/25 13:42	1
Selenium	<0.25		2.0	ug/L			10/03/25 13:42	1
Silver	<0.30		0.50	ug/L			10/03/25 13:42	1
Thallium	<0.10		0.30	ug/L			10/03/25 13:42	1
Zinc	<1.3		5.0	ug/L			10/03/25 13:42	1

**Lab Sample ID: LCS 380-177970/51**  
**Matrix: Water**  
**Analysis Batch: 177970**

**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	49.7		ug/L		99	85 - 115
Arsenic	50.0	49.8		ug/L		100	85 - 115
Beryllium	50.0	50.5		ug/L		101	85 - 115
Cadmium	50.0	50.5		ug/L		101	85 - 115
Chromium	50.0	49.6		ug/L		99	85 - 115
Copper	50.0	50.6		ug/L		101	85 - 115
Lead	50.0	51.0		ug/L		102	85 - 115
Nickel	50.0	49.7		ug/L		99	85 - 115
Selenium	50.0	50.4		ug/L		101	85 - 115
Silver	50.0	50.8		ug/L		102	85 - 115
Thallium	50.0	50.8		ug/L		102	85 - 115
Zinc	50.0	49.2		ug/L		98	85 - 115

**Lab Sample ID: LCSD 380-177970/52**  
**Matrix: Water**  
**Analysis Batch: 177970**

**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	49.9		ug/L		100	85 - 115	0	20
Arsenic	50.0	50.3		ug/L		101	85 - 115	1	20
Beryllium	50.0	51.0		ug/L		102	85 - 115	1	20
Cadmium	50.0	50.3		ug/L		101	85 - 115	0	20
Chromium	50.0	49.7		ug/L		99	85 - 115	0	20
Copper	50.0	51.0		ug/L		102	85 - 115	1	20
Lead	50.0	51.1		ug/L		102	85 - 115	0	20
Nickel	50.0	50.1		ug/L		100	85 - 115	1	20
Selenium	50.0	51.3		ug/L		103	85 - 115	2	20
Silver	50.0	50.4		ug/L		101	85 - 115	1	20
Thallium	50.0	51.2		ug/L		102	85 - 115	1	20
Zinc	50.0	49.9		ug/L		100	85 - 115	1	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LLCS 380-177970/50**  
**Matrix: Water**  
**Analysis Batch: 177970**

**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	1.00		ug/L		100	50 - 150
Arsenic	1.00	1.09		ug/L		109	50 - 150
Beryllium	0.300	0.303		ug/L		101	50 - 150
Cadmium	0.500	0.521		ug/L		104	50 - 150
Chromium	0.900	0.909		ug/L		101	50 - 150
Copper	1.00	1.04		ug/L		104	50 - 150
Lead	0.500	0.518		ug/L		104	50 - 150
Nickel	1.00	1.06		ug/L		106	50 - 150
Selenium	2.00	2.13		ug/L		106	50 - 150
Silver	0.500	0.515		ug/L		103	50 - 150
Thallium	0.300	0.315		ug/L		105	50 - 150
Zinc	5.00	5.18		ug/L		104	50 - 150

**Lab Sample ID: 380-174494-A-9 MS**  
**Matrix: Water**  
**Analysis Batch: 177970**

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	<1.0		50.0	50.4		ug/L		101	70 - 130
Arsenic	1.8		50.0	58.3		ug/L		113	70 - 130
Beryllium	<0.30		50.0	53.4		ug/L		107	70 - 130
Cadmium	<0.50		50.0	53.7		ug/L		107	70 - 130
Chromium	<0.90		50.0	49.6		ug/L		99	70 - 130
Copper	5.4		50.0	55.6		ug/L		100	70 - 130
Lead	<0.50		50.0	51.1		ug/L		102	70 - 130
Nickel	4.8		50.0	54.0		ug/L		98	70 - 130
Selenium	2.7	^2	50.0	66.1		ug/L		127	70 - 130
Silver	<0.50		50.0	48.7		ug/L		97	70 - 130
Thallium	<0.30		50.0	51.3		ug/L		102	70 - 130
Zinc	18		50.0	73.5		ug/L		111	70 - 130

**Lab Sample ID: 380-174494-A-9 MSD**  
**Matrix: Water**  
**Analysis Batch: 177970**

**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	51.2		ug/L		102	70 - 130	2	20
Arsenic	1.8		50.0	58.9		ug/L		114	70 - 130	1	20
Beryllium	<0.30		50.0	53.6		ug/L		107	70 - 130	0	20
Cadmium	<0.50		50.0	54.1		ug/L		108	70 - 130	1	20
Chromium	<0.90		50.0	49.8		ug/L		100	70 - 130	0	20
Copper	5.4		50.0	55.8		ug/L		101	70 - 130	0	20
Lead	<0.50		50.0	51.2		ug/L		102	70 - 130	0	20
Nickel	4.8		50.0	54.0		ug/L		98	70 - 130	0	20
Selenium	2.7	^2	50.0	66.6		ug/L		128	70 - 130	1	20
Silver	<0.50		50.0	48.1		ug/L		96	70 - 130	1	20
Thallium	<0.30		50.0	51.4		ug/L		102	70 - 130	0	20
Zinc	18		50.0	73.9		ug/L		112	70 - 130	1	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MBL 380-178090/47**  
**Matrix: Water**  
**Analysis Batch: 178090**

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.48		1.0	ug/L			10/06/25 14:11	1
Arsenic	<0.25		1.0	ug/L			10/06/25 14:11	1
Beryllium	<0.12		0.30	ug/L			10/06/25 14:11	1
Cadmium	<0.081		0.50	ug/L			10/06/25 14:11	1
Chromium	<0.33		0.90	ug/L			10/06/25 14:11	1
Copper	<0.28		1.0	ug/L			10/06/25 14:11	1
Lead	<0.084		0.50	ug/L			10/06/25 14:11	1
Nickel	<0.38		1.0	ug/L			10/06/25 14:11	1
Selenium	<0.25		2.0	ug/L			10/06/25 14:11	1
Silver	<0.30		0.50	ug/L			10/06/25 14:11	1
Thallium	<0.10		0.30	ug/L			10/06/25 14:11	1
Zinc	<1.3		5.0	ug/L			10/06/25 14:11	1

**Lab Sample ID: LCS 380-178090/49**  
**Matrix: Water**  
**Analysis Batch: 178090**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	50.0	50.1		ug/L		100	85 - 115
Arsenic	50.0	51.0		ug/L		102	85 - 115
Beryllium	50.0	48.2		ug/L		96	85 - 115
Cadmium	50.0	50.9		ug/L		102	85 - 115
Chromium	50.0	48.3		ug/L		97	85 - 115
Copper	50.0	49.9		ug/L		100	85 - 115
Lead	50.0	53.8		ug/L		108	85 - 115
Nickel	50.0	48.6		ug/L		97	85 - 115
Selenium	50.0	52.5		ug/L		105	85 - 115
Silver	50.0	50.3		ug/L		101	85 - 115
Thallium	50.0	53.2		ug/L		106	85 - 115
Zinc	50.0	49.7		ug/L		99	85 - 115

**Lab Sample ID: LCSD 380-178090/50**  
**Matrix: Water**  
**Analysis Batch: 178090**

**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	50.3		ug/L		101	85 - 115	0	20
Arsenic	50.0	50.7		ug/L		101	85 - 115	1	20
Beryllium	50.0	48.2		ug/L		96	85 - 115	0	20
Cadmium	50.0	50.6		ug/L		101	85 - 115	1	20
Chromium	50.0	47.9		ug/L		96	85 - 115	1	20
Copper	50.0	49.7		ug/L		99	85 - 115	0	20
Lead	50.0	53.2		ug/L		106	85 - 115	1	20
Nickel	50.0	48.4		ug/L		97	85 - 115	0	20
Selenium	50.0	52.3		ug/L		105	85 - 115	0	20
Silver	50.0	50.4		ug/L		101	85 - 115	0	20
Thallium	50.0	52.6		ug/L		105	85 - 115	1	20
Zinc	50.0	51.8		ug/L		104	85 - 115	4	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LLCS 380-178090/48**  
**Matrix: Water**  
**Analysis Batch: 178090**

**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	1.01		ug/L		101	50 - 150
Arsenic	1.00	1.02		ug/L		102	50 - 150
Beryllium	0.300	0.294	J	ug/L		98	50 - 150
Cadmium	0.500	0.476	J	ug/L		95	50 - 150
Chromium	0.900	0.823	J	ug/L		91	50 - 150
Copper	1.00	1.01		ug/L		101	50 - 150
Lead	0.500	0.527		ug/L		105	50 - 150
Nickel	1.00	0.979	J	ug/L		98	50 - 150
Selenium	2.00	1.94	J	ug/L		97	50 - 150
Silver	0.500	0.517		ug/L		103	50 - 150
Thallium	0.300	0.313		ug/L		104	50 - 150
Zinc	5.00	5.12		ug/L		102	50 - 150

**Lab Sample ID: 380-174662-A-1 MS**  
**Matrix: Water**  
**Analysis Batch: 178090**

**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	52.9		ug/L		106	70 - 130
Arsenic	1.3		50.0	62.0		ug/L		121	70 - 130
Beryllium	<0.30		50.0	41.8		ug/L		84	70 - 130
Cadmium	<0.50		50.0	52.3		ug/L		105	70 - 130
Chromium	1.6		50.0	51.7		ug/L		100	70 - 130
Copper	<1.0		50.0	47.3		ug/L		94	70 - 130
Lead	<0.50		50.0	49.1		ug/L		98	70 - 130
Nickel	7.3		50.0	54.2		ug/L		94	70 - 130
Selenium	4.4	F1	50.0	69.7	F1	ug/L		131	70 - 130
Silver	<0.50		50.0	43.1		ug/L		86	70 - 130
Thallium	<0.30		50.0	49.5		ug/L		99	70 - 130
Zinc	<5.0		50.0	50.5		ug/L		101	70 - 130

**Lab Sample ID: 380-174662-A-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 178090**

**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	54.5		ug/L		109	70 - 130	3	20
Arsenic	1.3		50.0	62.0		ug/L		121	70 - 130	0	20
Beryllium	<0.30		50.0	43.5		ug/L		87	70 - 130	4	20
Cadmium	<0.50		50.0	52.7		ug/L		105	70 - 130	1	20
Chromium	1.6		50.0	52.1		ug/L		101	70 - 130	1	20
Copper	<1.0		50.0	47.7		ug/L		94	70 - 130	1	20
Lead	<0.50		50.0	50.1		ug/L		100	70 - 130	2	20
Nickel	7.3		50.0	54.5		ug/L		94	70 - 130	1	20
Selenium	4.4	F1	50.0	69.7	F1	ug/L		131	70 - 130	0	20
Silver	<0.50		50.0	43.7		ug/L		87	70 - 130	1	20
Thallium	<0.30		50.0	50.4		ug/L		101	70 - 130	2	20
Zinc	<5.0		50.0	50.9		ug/L		102	70 - 130	1	20

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: MBL 380-178091/47**  
**Matrix: Water**  
**Analysis Batch: 178091**

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

Analyte	MBL Result	MBL Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	ug/L			10/06/25 14:11	1

**Lab Sample ID: LCS 380-178091/49**  
**Matrix: Water**  
**Analysis Batch: 178091**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.05		ug/L		105	85 - 115

**Lab Sample ID: LCSD 380-178091/50**  
**Matrix: Water**  
**Analysis Batch: 178091**

**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
Mercury	1.00	1.05		ug/L		105	85 - 115	0	20

**Lab Sample ID: LLCS 380-178091/48**  
**Matrix: Water**  
**Analysis Batch: 178091**

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

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.200	0.211		ug/L		106	50 - 150

**Lab Sample ID: 380-174722-H-1 MS**  
**Matrix: Water**  
**Analysis Batch: 178091**

**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
Mercury	<0.20		1.00	1.14		ug/L		114	70 - 130

**Lab Sample ID: 380-174722-H-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 178091**

**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
Mercury	<0.20		1.00	1.14		ug/L		114	70 - 130	0	20

## Method: SM 2320B - Alkalinity

**Lab Sample ID: MB 380-177989/1**  
**Matrix: Water**  
**Analysis Batch: 177989**

**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			10/03/25 16:09	1
Bicarbonate Alkalinity as CaCO3	<4.0		4.0	mg/L			10/03/25 16:09	1
Carbonate Alkalinity as CaCO3	<4.0		4.0	mg/L			10/03/25 16:09	1

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# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Method: SM 2320B - Alkalinity (Continued)

**Lab Sample ID: LCS 380-177989/4**  
**Matrix: Water**  
**Analysis Batch: 177989**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity	100	96.4		mg/L		96	90 - 110

**Lab Sample ID: LCSD 380-177989/19**  
**Matrix: Water**  
**Analysis Batch: 177989**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Alkalinity	100	96.2		mg/L		96	90 - 110	0	20

**Lab Sample ID: LLCS 380-177989/5**  
**Matrix: Water**  
**Analysis Batch: 177989**

**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	18.9		mg/L		95	90 - 110

**Lab Sample ID: MRL 380-177989/3**  
**Matrix: Water**  
**Analysis Batch: 177989**

**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	3.46	J	mg/L		87	50 - 150

**Lab Sample ID: 380-174393-CF-1 MS**  
**Matrix: Water**  
**Analysis Batch: 177989**

**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	87		100	182		mg/L		95	80 - 120

**Lab Sample ID: 380-174393-CF-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 177989**

**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	87		100	181		mg/L		95	80 - 120	0	20

**Lab Sample ID: 380-174393-CF-1 DU**  
**Matrix: Water**  
**Analysis Batch: 177989**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity	87		86.7		mg/L		0	20
Bicarbonate Alkalinity as CaCO3	87		86.7		mg/L		0	20
Carbonate Alkalinity as CaCO3	<4.0		<4.0		mg/L		NC	20

# QC Sample Results

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Method: SM 2510B - Conductivity, Specific Conductance

**Lab Sample ID: MB 380-177995/3**  
**Matrix: Water**  
**Analysis Batch: 177995**

**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			10/03/25 16:09	1

**Lab Sample ID: LCS 380-177995/5**  
**Matrix: Water**  
**Analysis Batch: 177995**

**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	1000		umhos/cm		100	90 - 110

**Lab Sample ID: LCSD 380-177995/17**  
**Matrix: Water**  
**Analysis Batch: 177995**

**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	994		umhos/cm		99	90 - 110	1	10

**Lab Sample ID: MRL 380-177995/4**  
**Matrix: Water**  
**Analysis Batch: 177995**

**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	2.00		umhos/cm		100	50 - 150

**Lab Sample ID: 380-174393-CF-1 DU**  
**Matrix: Water**  
**Analysis Batch: 177995**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	250		248		umhos/cm		0.08	20

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

**Lab Sample ID: MB 380-177829/1**  
**Matrix: Water**  
**Analysis Batch: 177829**

**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			10/03/25 12:58	1

**Lab Sample ID: HLCS 380-177829/5**  
**Matrix: Water**  
**Analysis Batch: 177829**

**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	704		mg/L		101	80 - 114

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: LCS 380-177829/4**  
**Matrix: Water**  
**Analysis Batch: 177829**

**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	172		mg/L		98	80 - 114

**Lab Sample ID: MRL 380-177829/2**  
**Matrix: Water**  
**Analysis Batch: 177829**

**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 380-177829/3**  
**Matrix: Water**  
**Analysis Batch: 177829**

**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: 380-174497-1 DU**  
**Matrix: Water**  
**Analysis Batch: 177829**

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		296		mg/L		2	10

## Method: SM 4500 F C - Fluoride

**Lab Sample ID: MB 380-177994/40**  
**Matrix: Water**  
**Analysis Batch: 177994**

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.050		0.050	mg/L			10/03/25 19:30	1

**Lab Sample ID: LCS 380-177994/42**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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 380-177994/43**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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	1.01		mg/L		101	90 - 110	0	10

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Method: SM 4500 F C - Fluoride (Continued)

**Lab Sample ID: MRL 380-177994/41**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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	0.0505		mg/L		101	50 - 150

**Lab Sample ID: MRL 380-177994/7**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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	0.0514		mg/L		103	50 - 150

**Lab Sample ID: 380-174620-A-12 MS**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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	0.31		1.00	1.29		mg/L		98	80 - 120

**Lab Sample ID: 380-174620-A-12 MSD**  
**Matrix: Water**  
**Analysis Batch: 177994**

**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	0.31		1.00	1.31		mg/L		99	80 - 120	1	20

## Method: SM 4500 H+ B - pH

**Lab Sample ID: MB 380-177992/5**  
**Matrix: Water**  
**Analysis Batch: 177992**

**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			10/03/25 16:09	1

**Lab Sample ID: LCS 380-177992/6**  
**Matrix: Water**  
**Analysis Batch: 177992**

**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 380-177992/18**  
**Matrix: Water**  
**Analysis Batch: 177992**

**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

# QC Sample Results

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

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

**Lab Sample ID: 380-174393-CF-1 DU**  
**Matrix: Water**  
**Analysis Batch: 177992**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	8.0		8.0		SU		0.4	2

## Method: SM 4500 S2 D - Sulfide, Total

**Lab Sample ID: MB 380-177858/3**  
**Matrix: Water**  
**Analysis Batch: 177858**

**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			10/03/25 15:33	1

**Lab Sample ID: LCS 380-177858/5**  
**Matrix: Water**  
**Analysis Batch: 177858**

**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	0.260		mg/L		104	90 - 110

**Lab Sample ID: LCSD 380-177858/6**  
**Matrix: Water**  
**Analysis Batch: 177858**

**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	0.249		mg/L		100	90 - 110	4	20

**Lab Sample ID: MRL 380-177858/4**  
**Matrix: Water**  
**Analysis Batch: 177858**

**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	0.0486	J	mg/L		97	50 - 150

**Lab Sample ID: 380-174497-2 MS**  
**Matrix: Drinking Water**  
**Analysis Batch: 177858**

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)**  
**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	0.205		mg/L		82	80 - 120

**Lab Sample ID: 380-174497-2 MSD**  
**Matrix: Drinking Water**  
**Analysis Batch: 177858**

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)**  
**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	0.195	F1	mg/L		78	80 - 120	5	20

# QC Association Summary

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## GC/MS VOA

### Analysis Batch: 177726

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC	Total/NA	Water	524.2	
MB 380-177726/8	Method Blank	Total/NA	Water	524.2	
LCS 380-177726/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-177726/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-177726/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-177726/4	Lab Control Sample	Total/NA	Water	524.2	

### Analysis Batch: 177727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP0	Total/NA	Drinking Water	524.2	
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
MB 380-177727/8	Method Blank	Total/NA	Water	524.2	
LCS 380-177727/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-177727/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-177727/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-177727/4	Lab Control Sample	Total/NA	Water	524.2	

### Analysis Batch: 178027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
MB 380-178027/15	Method Blank	Total/NA	Water	524.2	
LCS 380-178027/11	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-178027/12	Lab Control Sample Dup	Total/NA	Water	524.2	
MRL 380-178027/13	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-178027/14	Lab Control Sample	Total/NA	Water	524.2	

### Analysis Batch: 178133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP0	Total/NA	Drinking Water	524.2	
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC	Total/NA	Water	524.2	

### Analysis Batch: 178175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 380-178175/3	Lab Control Sample	Total/NA	Water	524.2	
MRL 380-178175/4	Lab Control Sample	Total/NA	Water	524.2	

### Analysis Batch: 178240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	524.2	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP0	Total/NA	Drinking Water	524.2	
MB 380-178240/5	Method Blank	Total/NA	Water	524.2	
LCS 380-178240/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 380-178240/4	Lab Control Sample Dup	Total/NA	Water	524.2	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## GC/MS Semi VOA

### Prep Batch: 177756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	525.2	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	
MB 380-177756/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-177756/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-177756/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-174230-V-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-174329-K-2-A DU	Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 177978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	525.2	177756
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	525.2	177756
MB 380-177756/20-A	Method Blank	Total/NA	Water	525.2	177756
LCS 380-177756/22-A	Lab Control Sample	Total/NA	Water	525.2	177756
MRL 380-177756/21-A	Lab Control Sample	Total/NA	Water	525.2	177756
380-174230-V-1-A MS	Matrix Spike	Total/NA	Water	525.2	177756
380-174329-K-2-A DU	Duplicate	Total/NA	Water	525.2	177756

### Prep Batch: 636448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	625.1	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1	
MB 570-636448/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-636448/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-636448/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

### Analysis Batch: 639157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	625.1 SIM	636448
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1 SIM	636448
MB 570-636448/1-A	Method Blank	Total/NA	Water	625.1 SIM	636448
LCS 570-636448/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	636448
LCSD 570-636448/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	636448

### Analysis Batch: 643083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	625.1	636448
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	625.1	636448
MB 570-636448/1-A	Method Blank	Total/NA	Water	625.1	636448

## GC VOA

### Analysis Batch: 636604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	8015B GRO LL	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B GRO LL	
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	8015B GRO LL	
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC)	Total/NA	Water	8015B GRO LL	
MB 570-636604/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-636604/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-636604/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	

# QC Association Summary

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

Job ID: 380-174497-1  
 SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## GC VOA (Continued)

### Analysis Batch: 636604 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 570-636604/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-173600-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-173600-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

## GC Semi VOA

### Prep Batch: 177809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	504.1	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	504.1	
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	504.1	
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC)	Total/NA	Water	504.1	
MBL 380-177809/4-A	Method Blank	Total/NA	Water	504.1	
LCS 380-177809/29-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-177809/2-A	Lab Control Sample	Total/NA	Water	504.1	
MRL 380-177809/3-A	Lab Control Sample	Total/NA	Water	504.1	
380-173719-BJ-1-A MS	Matrix Spike	Total/NA	Water	504.1	
380-173871-BO-1-A DU	Duplicate	Total/NA	Water	504.1	

### Analysis Batch: 177937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	504.1	177809
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	504.1	177809
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Total/NA	Water	504.1	177809
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TPC)	Total/NA	Water	504.1	177809
MBL 380-177809/4-A	Method Blank	Total/NA	Water	504.1	177809
LCS 380-177809/29-A	Lab Control Sample	Total/NA	Water	504.1	177809
MRL 380-177809/2-A	Lab Control Sample	Total/NA	Water	504.1	177809
MRL 380-177809/3-A	Lab Control Sample	Total/NA	Water	504.1	177809
380-173719-BJ-1-A MS	Matrix Spike	Total/NA	Water	504.1	177809
380-173871-BO-1-A DU	Duplicate	Total/NA	Water	504.1	177809

### Prep Batch: 177969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	505	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	505	
MB 380-177969/32-A	Method Blank	Total/NA	Water	505	
LCS 380-177969/16-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-177969/24-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-177969/57-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-177969/59-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-177969/60-A	Lab Control Sample	Total/NA	Water	505	
LCS 380-177969/8-A	Lab Control Sample	Total/NA	Water	505	
LCSD 380-177969/58-A	Lab Control Sample Dup	Total/NA	Water	505	
MRL 380-177969/30-A	Lab Control Sample	Total/NA	Water	505	
MRL 380-177969/31-A	Lab Control Sample	Total/NA	Water	505	
380-174568-F-1-A MS	Matrix Spike	Total/NA	Water	505	
380-174568-G-1-A MS	Matrix Spike	Total/NA	Water	505	
380-174708-E-1-A MS	Matrix Spike	Total/NA	Water	505	
380-174708-F-1-A MS	Matrix Spike	Total/NA	Water	505	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## GC Semi VOA

### Analysis Batch: 178184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	505	177969
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	505	177969
MB 380-177969/32-A	Method Blank	Total/NA	Water	505	177969
LCS 380-177969/16-A	Lab Control Sample	Total/NA	Water	505	177969
LCS 380-177969/24-A	Lab Control Sample	Total/NA	Water	505	177969
LCS 380-177969/57-A	Lab Control Sample	Total/NA	Water	505	177969
LCS 380-177969/59-A	Lab Control Sample	Total/NA	Water	505	177969
LCS 380-177969/60-A	Lab Control Sample	Total/NA	Water	505	177969
LCS 380-177969/8-A	Lab Control Sample	Total/NA	Water	505	177969
LCSD 380-177969/58-A	Lab Control Sample Dup	Total/NA	Water	505	177969
MRL 380-177969/30-A	Lab Control Sample	Total/NA	Water	505	177969
MRL 380-177969/31-A	Lab Control Sample	Total/NA	Water	505	177969
380-174568-F-1-A MS	Matrix Spike	Total/NA	Water	505	177969
380-174568-G-1-A MS	Matrix Spike	Total/NA	Water	505	177969
380-174708-E-1-A MS	Matrix Spike	Total/NA	Water	505	177969
380-174708-F-1-A MS	Matrix Spike	Total/NA	Water	505	177969

### Prep Batch: 636670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	3510C	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	3510C	
MB 570-636670/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-636670/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-636670/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-636670/4-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 637626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	8015B	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B	
MB 570-637626/3	Method Blank	Total/NA	Water	8015B	
LCS 570-637626/5	Lab Control Sample	Total/NA	Water	8015B	
LCSD 570-637626/6	Lab Control Sample Dup	Total/NA	Water	8015B	
MRL 570-637626/4	Lab Control Sample	Total/NA	Water	8015B	
570-249246-A-1 MS	Matrix Spike	Total/NA	Water	8015B	
570-249246-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	

### Analysis Batch: 639324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	8015B	636670
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	8015B	636670
MB 570-636670/1-A	Method Blank	Total/NA	Water	8015B	636670
LCS 570-636670/2-A	Lab Control Sample	Total/NA	Water	8015B	636670
LCSD 570-636670/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	636670
MRL 570-636670/4-A	Lab Control Sample	Total/NA	Water	8015B	636670

## HPLC/IC

### Analysis Batch: 177602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	300.0	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## HPLC/IC (Continued)

### Analysis Batch: 177602 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	300.0	
MB 380-177602/40	Method Blank	Total/NA	Water	300.0	
LCS 380-177602/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-177602/43	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-177602/46	Lab Control Sample	Total/NA	Water	300.0	
380-174496-C-6 MS	Matrix Spike	Total/NA	Water	300.0	
380-174496-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 177603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	300.0	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	300.0	
MB 380-177603/40	Method Blank	Total/NA	Water	300.0	
LCS 380-177603/42	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-177603/43	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-177603/46	Lab Control Sample	Total/NA	Water	300.0	
380-174496-C-6 MS	Matrix Spike	Total/NA	Water	300.0	
380-174496-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 177853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-177853/4	Method Blank	Total/NA	Water	300.0	
LCS 380-177853/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-177853/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-177853/5	Lab Control Sample	Total/NA	Water	300.0	
380-174500-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-174500-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 177854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	300.0	
MB 380-177854/4	Method Blank	Total/NA	Water	300.0	
LCS 380-177854/6	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-177854/7	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-177854/5	Lab Control Sample	Total/NA	Water	300.0	
380-174500-A-2 MS	Matrix Spike	Total/NA	Water	300.0	
380-174500-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

### Analysis Batch: 177913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	300.0	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01	Total/NA	Drinking Water	300.0	
MB 380-177913/6	Method Blank	Total/NA	Water	300.0	
LCS 380-177913/7	Lab Control Sample	Total/NA	Water	300.0	
LCSD 380-177913/8	Lab Control Sample Dup	Total/NA	Water	300.0	
MRL 380-177913/5	Lab Control Sample	Total/NA	Water	300.0	
380-173871-BH-1 MS	Matrix Spike	Total/NA	Water	300.0	
380-173871-BH-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## Metals

### Analysis Batch: 177970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	200.8	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	200.8	
MBL 380-177970/49	Method Blank	Total/NA	Water	200.8	
LCS 380-177970/51	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-177970/52	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-177970/50	Lab Control Sample	Total/NA	Water	200.8	
380-174494-A-9 MS	Matrix Spike	Total/NA	Water	200.8	
380-174494-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

### Analysis Batch: 177975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	200.7 Rev 4.4	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	200.7 Rev 4.4	
MBL 380-177975/149	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 380-177975/151	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LCSD 380-177975/152	Lab Control Sample Dup	Total/NA	Water	200.7 Rev 4.4	
LLCS 380-177975/150	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
380-174491-A-3 MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	
380-174491-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	

### Analysis Batch: 178090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MBL 380-178090/47	Method Blank	Total/NA	Water	200.8	
LCS 380-178090/49	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-178090/50	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-178090/48	Lab Control Sample	Total/NA	Water	200.8	
380-174662-A-1 MS	Matrix Spike	Total/NA	Water	200.8	
380-174662-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

### Analysis Batch: 178091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	200.8	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	200.8	
MBL 380-178091/47	Method Blank	Total/NA	Water	200.8	
LCS 380-178091/49	Lab Control Sample	Total/NA	Water	200.8	
LCSD 380-178091/50	Lab Control Sample Dup	Total/NA	Water	200.8	
LLCS 380-178091/48	Lab Control Sample	Total/NA	Water	200.8	
380-174722-H-1 MS	Matrix Spike	Total/NA	Water	200.8	
380-174722-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	200.8	

## General Chemistry

### Analysis Batch: 177829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 2540C	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 2540C	
MB 380-177829/1	Method Blank	Total/NA	Water	SM 2540C	
HLCS 380-177829/5	Lab Control Sample	Total/NA	Water	SM 2540C	
LCS 380-177829/4	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-177829/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 380-177829/3	Lab Control Sample	Total/NA	Water	SM 2540C	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## General Chemistry (Continued)

### Analysis Batch: 177829 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1 DU	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 2540C	

### Analysis Batch: 177858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 4500 S2 D	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 4500 S2 D	
MB 380-177858/3	Method Blank	Total/NA	Water	SM 4500 S2 D	
LCS 380-177858/5	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
LCSD 380-177858/6	Lab Control Sample Dup	Total/NA	Water	SM 4500 S2 D	
MRL 380-177858/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 D	
380-174497-2 MS	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 4500 S2 D	
380-174497-2 MSD	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 4500 S2 D	

### Analysis Batch: 177989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 2320B	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 2320B	
MB 380-177989/1	Method Blank	Total/NA	Water	SM 2320B	
LCS 380-177989/4	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSD 380-177989/19	Lab Control Sample Dup	Total/NA	Water	SM 2320B	
LLCS 380-177989/5	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 380-177989/3	Lab Control Sample	Total/NA	Water	SM 2320B	
380-174393-CF-1 MS	Matrix Spike	Total/NA	Water	SM 2320B	
380-174393-CF-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2320B	
380-174393-CF-1 DU	Duplicate	Total/NA	Water	SM 2320B	

### Analysis Batch: 177992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 4500 H+ B	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 4500 H+ B	
MB 380-177992/5	Method Blank	Total/NA	Water	SM 4500 H+ B	
LCS 380-177992/6	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	
LCSD 380-177992/18	Lab Control Sample Dup	Total/NA	Water	SM 4500 H+ B	
380-174393-CF-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	

### Analysis Batch: 177994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 4500 F C	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 4500 F C	
MB 380-177994/40	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 380-177994/42	Lab Control Sample	Total/NA	Water	SM 4500 F C	
LCSD 380-177994/43	Lab Control Sample Dup	Total/NA	Water	SM 4500 F C	
MRL 380-177994/41	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MRL 380-177994/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
380-174620-A-12 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
380-174620-A-12 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	

### Analysis Batch: 177995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-174497-1	MOANALUA WELLS (331-223-TP202)	Total/NA	Water	SM 2510B	
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP01)	Total/NA	Drinking Water	SM 2510B	

# QC Association Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

## General Chemistry (Continued)

### Analysis Batch: 177995 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 380-177995/3	Method Blank	Total/NA	Water	SM 2510B	
LCS 380-177995/5	Lab Control Sample	Total/NA	Water	SM 2510B	
LCSD 380-177995/17	Lab Control Sample Dup	Total/NA	Water	SM 2510B	
MRL 380-177995/4	Lab Control Sample	Total/NA	Water	SM 2510B	
380-174393-CF-1 DU	Duplicate	Total/NA	Water	SM 2510B	

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# Lab Chronicle

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-1**

**Date Collected: 10/01/25 09:28**

**Matrix: Water**

**Date Received: 10/02/25 10:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	178133	BS7X	EA POM	10/03/25 13:42
Total/NA	Analysis	524.2		1	177727	N4CJ	EA POM	10/03/25 13:42
Total/NA	Analysis	524.2		1	178027	YNB8	EA POM	10/06/25 20:38
Total/NA	Analysis	524.2		1	178240	YNB8	EA POM	10/08/25 06:09
Total/NA	Prep	525.2			177756	X5FS	EA POM	10/03/25 09:45
Total/NA	Analysis	525.2		1	177978	UPAC	EA POM	10/06/25 14:15
Total/NA	Prep	625.1			636448	S4EA	EET CAL 4	10/07/25 05:00
Total/NA	Analysis	625.1		1	643083	PQS1	EET CAL 4	10/20/25 09:37
Total/NA	Prep	625.1			636448	S4EA	EET CAL 4	10/07/25 05:00
Total/NA	Analysis	625.1 SIM		1	639157	PQS1	EET CAL 4	10/12/25 10:02
Total/NA	Analysis	8015B GRO LL		1	636604	YD9V	EET CAL 4	10/07/25 14:49
Total/NA	Prep	504.1			177809	GVC6	EA POM	10/03/25 15:21 - 10/03/25 17:07 <sup>1</sup>
Total/NA	Analysis	504.1		1	177937	WE3W	EA POM	10/04/25 02:37
Total/NA	Prep	505			177969	DR5R	EA POM	10/06/25 12:58 - 10/06/25 14:28 <sup>1</sup>
Total/NA	Analysis	505		1	178184	DR5R	EA POM	10/07/25 02:37
Total/NA	Prep	3510C			636670	TVD6	EET CAL 4	10/07/25 09:55
Total/NA	Analysis	8015B		1	639324	NR	EET CAL 4	10/13/25 04:26
Total/NA	Analysis	8015B		1	637626	ZE2W	EET CAL 4	10/09/25 16:38
Total/NA	Analysis	300.0		5	177602	DXD4	EA POM	10/03/25 04:04
Total/NA	Analysis	300.0		5	177603	DXD4	EA POM	10/03/25 04:04
Total/NA	Analysis	300.0		1	177913	UNJR	EA POM	10/04/25 04:15
Total/NA	Analysis	200.7 Rev 4.4		1	177975	MF7S	EA POM	10/03/25 16:10
Total/NA	Analysis	200.8		1	177970	T8BB	EA POM	10/03/25 14:01
Total/NA	Analysis	200.8		1	178091	T8BB	EA POM	10/06/25 14:49
Total/NA	Analysis	SM 2320B		1	177989	PK4Q	EA POM	10/03/25 17:42
Total/NA	Analysis	SM 2510B		1	177995	PK4Q	EA POM	10/03/25 17:42
Total/NA	Analysis	SM 2540C		1	177829	UJRF	EA POM	10/03/25 12:58
Total/NA	Analysis	SM 4500 F C		1	177994	PK4Q	EA POM	10/03/25 20:00
Total/NA	Analysis	SM 4500 H+ B		1	177992	PK4Q	EA POM	10/03/25 17:42
Total/NA	Analysis	SM 4500 S2 D		1	177858	ZJ2C	EA POM	10/03/25 15:33

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10**

**Matrix: Drinking Water**

**Date Received: 10/02/25 10:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	178133	BS7X	EA POM	10/03/25 14:04
Total/NA	Analysis	524.2		1	177727	N4CJ	EA POM	10/03/25 14:04
Total/NA	Analysis	524.2		1	178240	YNB8	EA POM	10/08/25 05:46
Total/NA	Prep	525.2			177756	X5FS	EA POM	10/03/25 09:45
Total/NA	Analysis	525.2		1	177978	UPAC	EA POM	10/06/25 14:35

Eurofins Eaton Analytical Pomona

# Lab Chronicle

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1  
(331-206-TP065)**

**Lab Sample ID: 380-174497-2**

**Date Collected: 10/01/25 10:10**

**Matrix: Drinking Water**

**Date Received: 10/02/25 10:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	625.1			636448	S4EA	EET CAL 4	10/07/25 05:00
Total/NA	Analysis	625.1		1	643083	PQS1	EET CAL 4	10/20/25 10:01
Total/NA	Prep	625.1			636448	S4EA	EET CAL 4	10/07/25 05:00
Total/NA	Analysis	625.1 SIM		1	639157	PQS1	EET CAL 4	10/12/25 10:23
Total/NA	Analysis	8015B GRO LL		1	636604	YD9V	EET CAL 4	10/07/25 15:09
Total/NA	Prep	504.1			177809	GVC6	EA POM	10/03/25 15:21 - 10/03/25 17:07 <sup>1</sup>
Total/NA	Analysis	504.1		1	177937	WE3W	EA POM	10/04/25 03:00
Total/NA	Prep	505			177969	DR5R	EA POM	10/06/25 12:58 - 10/06/25 14:28 <sup>1</sup>
Total/NA	Analysis	505		1	178184	DR5R	EA POM	10/07/25 02:59
Total/NA	Prep	3510C			636670	TVD6	EET CAL 4	10/07/25 09:55
Total/NA	Analysis	8015B		1	639324	NR	EET CAL 4	10/13/25 04:47
Total/NA	Analysis	8015B		1	637626	ZE2W	EET CAL 4	10/09/25 16:59
Total/NA	Analysis	300.0		2	177602	DXD4	EA POM	10/03/25 03:00
Total/NA	Analysis	300.0		2	177603	DXD4	EA POM	10/03/25 03:00
Total/NA	Analysis	300.0		5	177854	BG6L	EA POM	10/03/25 14:43
Total/NA	Analysis	300.0		5	177913	UNJR	EA POM	10/04/25 04:41
Total/NA	Analysis	200.7 Rev 4.4		1	177975	MF7S	EA POM	10/03/25 16:12
Total/NA	Analysis	200.8		1	177970	T8BB	EA POM	10/03/25 14:07
Total/NA	Analysis	200.8		1	178091	T8BB	EA POM	10/06/25 14:52
Total/NA	Analysis	SM 2320B		1	177989	PK4Q	EA POM	10/03/25 18:26
Total/NA	Analysis	SM 2510B		1	177995	PK4Q	EA POM	10/03/25 18:26
Total/NA	Analysis	SM 2540C		1	177829	UJRF	EA POM	10/03/25 12:58
Total/NA	Analysis	SM 4500 F C		1	177994	PK4Q	EA POM	10/03/25 20:14
Total/NA	Analysis	SM 4500 H+ B		1	177992	PK4Q	EA POM	10/03/25 18:26
Total/NA	Analysis	SM 4500 S2 D		1	177858	ZJ2C	EA POM	10/03/25 15:33

**Client Sample ID: TB: MOANALUA WELLS (331-223-TP202)**

**Lab Sample ID: 380-174497-3**

**Date Collected: 10/01/25 09:28**

**Matrix: Water**

**Date Received: 10/02/25 10:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	178133	BS7X	EA POM	10/03/25 14:27
Total/NA	Analysis	524.2		1	177727	N4CJ	EA POM	10/03/25 14:27
Total/NA	Analysis	524.2		1	178027	YNB8	EA POM	10/06/25 20:16
Total/NA	Analysis	8015B GRO LL		1	636604	YD9V	EET CAL 4	10/07/25 19:26
Total/NA	Prep	504.1			177809	GVC6	EA POM	10/03/25 15:21 - 10/03/25 17:07 <sup>1</sup>
Total/NA	Analysis	504.1		1	177937	WE3W	EA POM	10/04/25 03:23

# Lab Chronicle

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Client Sample ID: TB: HALAWA WELLS UNITS 1 & 2  
(331-206-TP065)**

**Lab Sample ID: 380-174497-4**

**Date Collected: 10/01/25 10:10**

**Matrix: Water**

**Date Received: 10/02/25 10:06**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	524.2		1	177726	Q6AD	EA POM	10/03/25 18:06
Total/NA	Analysis	524.2		1	178133	BS7X	EA POM	10/03/25 18:06
Total/NA	Analysis	8015B GRO LL		1	636604	YD9V	EET CAL 4	10/07/25 19:46
Total/NA	Prep	504.1			177809	GVC6	EA POM	10/03/25 15:21 - 10/03/25 17:07 <sup>1</sup>
Total/NA	Analysis	504.1		1	177937	WE3W	EA POM	10/04/25 03:46

<sup>1</sup> 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: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 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	Drinking Water	Polychlorinated biphenyls, Total
505	505	Water	Polychlorinated biphenyls, Total
524.2		Drinking Water	1,3-Dichloropropene, Total
524.2		Drinking Water	2-Butanone (MEK)
524.2		Drinking Water	Acetone
524.2		Drinking Water	Bromodichloromethane
524.2		Drinking Water	Bromoethane
524.2		Drinking Water	Bromoform
524.2		Drinking Water	Chlorodibromomethane
524.2		Drinking Water	Chloroform (Trichloromethane)
524.2		Drinking Water	m,p-Xylenes
524.2		Drinking Water	o-Xylene
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	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4'-DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate

# Accreditation/Certification Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 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
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The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor
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
SM 2320B		Drinking Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Drinking Water	Carbonate Alkalinity as CaCO3

# Accreditation/Certification Summary

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

Job ID: 380-174497-1

SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 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		Drinking Water	Sulfide
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	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-26

# Method Summary

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

Job ID: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 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
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: 380-174497-1  
SDG: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

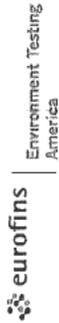
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-174497-1	MOANALUA WELLS (331-223-TP202)	Water	10/01/25 09:28	10/02/25 10:06	HI0000331
380-174497-2	HALAWA WELLS UNITS 1 & 2 P1 (331-206-TP065)	Drinking Water	10/01/25 10:10	10/02/25 10:06	HI0000331
380-174497-3	TB: MOANALUA WELLS (331-223-TP202)	Water	10/01/25 09:28	10/02/25 10:06	
380-174497-4	TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065)	Water	10/01/25 10:10	10/02/25 10:06	

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

# Chain of Custody Record



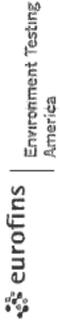
<b>Client Information</b>		Lab PM: Lopez, Maria		Carrier Tracking No(s)		COC No:	
Client Contact: Kirk Iwamoto		Phone: +1 8087485840		State of Origin		Page: Page 2 of 2	
Company: City & County of Honolulu		E-Mail: Maria.Lopez@et.euronisus.com		Job #:		Job #:	
Address: 630 South Beretania Street, Chemistry Lab		Due Date Requested		Analysis Requested		Preservation Codes	
City: Honolulu		TAT Requested (days):		5041 PRC - Local Method		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
State, Zip: HI 96843		Compliance Project: Δ No		Field Filled Sample (Yes or No)		Other	
Phone: 808-748-5040 (tel)		PO #: C20525101 exp 05312023		Form MS/MSD (Yes or No)		Special Instructions/Note:	
Email: kiwamoto@hbws.org		WO #: 38001111		Matrix (Water, Solid, Organic)		93-20-85 (HSA)	
Project Name: RED-HILL		SSOW#:		Sample Type (C=Comp, G=grab)		95 (750A)	
Site:		Sample Date		Sample Time		Total Number of Containers	
Sample Identification		Sample Date		Sample Time		Total Number of Containers	
Moanalua Wells		1-Oct-2025		0928		2	
Halawa Wells Units 1 & 2		1-Oct-2025		1010		2	
TB: Moanalua Wells		1-Oct-2025		0928		2	
TB: Halawa Wells Units 1 & 2		1-Oct-2025		1010		2	
Possible Hazard Identification		Sample Date		Sample Time		Total Number of Containers	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Date		Sample Time		Total Number of Containers	
Deliverable Requested I II III IV Other (specify)		Sample Date		Sample Time		Total Number of Containers	
Empty Kit Relinquished by		Date		Time		Total Number of Containers	
Relinquished by: Bailey		Date/Time: 01 Oct 2025 1400		Company: HBWS		Total Number of Containers	
Relinquished by:		Date/Time:		Company:		Total Number of Containers	
Relinquished by:		Date/Time:		Company:		Total Number of Containers	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Total Number of Containers	
Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Total Number of Containers	
Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Total Number of Containers	





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

**Chain of Custody Record**



<b>Client Information</b>		Lab PM: Lopez, Maria		Carrier Tracking No(s)		COC No:	
Client Contact: Kirk Iwamoto		E-Mail: Maria.Lopez@tet.euronisus.com		State of Origin		Page: Page 2 of 2	
Company: City & County of Honolulu		PWSID:		Analysis Requested		Job #:	
Address: 630 South Beretania Street, Chemistry Lab		Due Date Requested		Form MS/MSD (Yes or No)		Preservation Codes	
City: Honolulu		TAT Requested (days):		Field Filled Sample (Yes or No)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other	
State, Zip: HI 96843		Compliance Project: Δ No		5041 PRC - Local Method		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)	
Phone: 808-748-5040 (tel)		PO #: C20525101 exp 05312023		Form MS/MSD (Yes or No)		Special Instructions/Note:	
Email: kiwamoto@hbws.org		WO #: 38001111		Field Filled Sample (Yes or No)		93-20-85 95 (750A)	
Project Name: RED-HILL		Project #: 38001111		Matrix (Water, Solid, Organic)			
Site:		SSOW#:		Sample Type (C=Comp, G=grab)			
Sample Identification		Sample Date		Sample Time		Preservation Code:	
Moanalua Wells						Water	
Halawa Wells Units 1 & 2						Water	
TB, Moanalua Wells		1-Oct-2025		0928		2	
TB: Halawa Wells Units 1 & 2		1-Oct-2025		1010		2	
Possible Hazard Identification		Poison B <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Flammable <input type="checkbox"/> Non-Hazard <input type="checkbox"/>		Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested I II III IV Other (specify)		Empty Kit Relinquished by		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/>		Months	
Special Instructions/OC Requirements		Date		Method of Shipment			
Relinquished by: Bailey		Date/Time: 01 Oct 2025 1400		Company: HBWS		Received by: [Signature]	
Relinquished by:		Date/Time:		Company:		Date/Time: 10/22/25 1006	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		15.0-0.2 = 4.8 / 1.0-0.2 = 0.8 / 0.3-4.0-0.2 = 3.2	



**Eurofins Eaton Analytical Pomona**

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

**Chain of Custody Record**



eurofins

Loc: 380  
**174497**

<b>Client Information (Sub Contract Lab)</b>		Sampler: N/A		Lab PM: Lopez, Maria		Carrier Tracking No(s): N/A		COC No: 380-260275.1																	
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Maria.Lopez@et.eurofinsus.com		State of Origin: Hawaii		Page: Page 1 of 1																	
Company: Eurofins Environment Testing Southwest,				Accreditations Required (See note): State - Hawaii				Job #: 380-1744																	
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 10/15/2025		<b>Analysis Requested</b>						Preservati															
City: Tustin		TAT Requested (days): N/A																							
State, Zip: CA, 92780		PO #: N/A		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		8015B_DAIETHANOL		8015B_DRO_LL_CS351DC_LLPLNLRanges: C10-C24/C24-C36/C3-C18		8015B_GRO_LLJ6030C(MOD) GRO		625_1_SIM#25_Prep(MOD) Extended List		625_1/625_Prep(MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers		Other: N/A							
Phone: 714-895-5494(Tel)		WO #: N/A																							
Email: N/A		Project #: 38001111		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		8015B_DAIETHANOL		8015B_DRO_LL_CS351DC_LLPLNLRanges: C10-C24/C24-C36/C3-C18		8015B_GRO_LLJ6030C(MOD) GRO		625_1_SIM#25_Prep(MOD) Extended List		625_1/625_Prep(MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers		Other: N/A							
Project Name: RED-HILL		SSOW#: N/A																							
Site: Honolulu BWS Sites		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oli, ST=Tissue, A=Air)		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		8015B_DAIETHANOL		8015B_DRO_LL_CS351DC_LLPLNLRanges: C10-C24/C24-C36/C3-C18		8015B_GRO_LLJ6030C(MOD) GRO		625_1_SIM#25_Prep(MOD) Extended List		625_1/625_Prep(MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers		Other: N/A	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oli, ST=Tissue, A=Air)		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		8015B_DAIETHANOL		8015B_DRO_LL_CS351DC_LLPLNLRanges: C10-C24/C24-C36/C3-C18		8015B_GRO_LLJ6030C(MOD) GRO		625_1_SIM#25_Prep(MOD) Extended List		625_1/625_Prep(MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers		Other: N/A	
MOANALUA WELLS (331-223-TP202) (380-174497-1)		10/1/25		09:28 Hawaiian		G Water		Water		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		9		MRLs are needed., MRLs are needed. Confirm any hits >RL.	
HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-174497-2)		10/1/25		10:10 Hawaiian		G Water		Water		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		9		MRLs are needed., MRLs are needed. Confirm any hits >RL.	
TB: MOANALUA WELLS (331-223-TP202) (380-174497-3)		10/1/25		09:28 Hawaiian		G Water		Water		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		2		MRLs are needed.	
TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-174497-4)		10/1/25		10:10 Hawaiian		G Water		Water		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		X X X X X		2		MRLs are needed.	
Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.		Possible Hazard Identification		Unconfirmed		Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 2		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return To Client		<input type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For		Months		Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:		Cooler Temperature(s) °C and Other Remarks:					
Relinquished by: <i>Yes</i>		Date/Time: 10/3/25 1100		Company: <i>ESA</i>		Received by: <i>ES</i>		Date/Time: 10/3/25 1100		Company: <i>ES</i>		Cooler Temperature(s) °C and Other Remarks: 1.4/1.4 508													
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Ver: 10/10/2024		10/22/2025																			



**Eurofins Eaton Analytical Pomona**

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Pomona, CA 91768-2642  
Phone: 626-386-1100

**Chain of Custody Record**



eurofins

Loc: 380  
**174497**

<b>Client Information (Sub Contract Lab)</b>		Sampler: N/A		Lab PM: Lopez, Maria		Carrier Tracking No(s): N/A		COC No: 380-260275.1											
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Maria.Lopez@et.eurofinsus.com		State of Origin: Hawaii		Page: Page 1 of 1											
Company: Eurofins Environment Testing Southwest,				Accreditations Required (See note): State - Hawaii				Job #: 380-1744											
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 10/15/2025		<b>Analysis Requested</b>						Preservati									
City: Tustin		TAT Requested (days): N/A																	
State, Zip: CA, 92780		PO #: N/A		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		8015B_DAIETHANOL		8015B_DRO_LL_CS351DC_LLPLL Ranges: C10-C24/C24-C36/C3-C18		8015B_GRO_LLJ6030C(MOD) GRO		625_1_SIM#25_Prep(MOD) Extended List		625_1/625_Prep(MOD) Tentatively Identified Compounds (Hold)		Total Number of Containers		Other: N/A	
Phone: 714-895-5494(Tel)		WO #: N/A																	
Email: N/A		Project #: 38001111		Special Instructions/Notes:		MRLs are needed., MRLs are needed. Confirm any hits >RL.		MRLs are needed., MRLs are needed. Confirm any hits >RL.		MRLs are needed.		MRLs are needed.							
Project Name: RED-HILL		SSOW#: N/A																	
Site: Honolulu BWS Sites		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, ST=Tissue, A=Air)		Preservation Code:									
Sample Identification - Client ID (Lab ID)																			
MOANALUA WELLS (331-223-TP202) (380-174497-1)		10/1/25		09:28 Hawaiian		G Water		Water		X X X X X									
HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-174497-2)		10/1/25		10:10 Hawaiian		G Water		Water		X X X X X									
TB: MOANALUA WELLS (331-223-TP202) (380-174497-3)		10/1/25		09:28 Hawaiian		G Water		Water		X									
TB: HALAWA WELLS UNITS 1 & 2 (331-206-TP065) (380-174497-4)		10/1/25		10:10 Hawaiian		G Water		Water		X									
<p>Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Eaton Analytical, LLC.</p>																			
<b>Possible Hazard Identification</b>										<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>									
Unconfirmed										<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For            Months									
Deliverable Requested: I, II, III, IV, Other (specify)										Special Instructions/QC Requirements:									
Empty Kit Relinquished by:										Date:									
Relinquished by: <i>Yes</i>										Date/Time: 10/3/25 1100									
Company: <i>ESA</i>										Received by: <i>[Signature]</i>									
Date/Time: 10/3/25 1100										Date/Time: 10/3/25 1100									
Company: <i>ESA</i>										Company: <i>EC</i>									
Custody Seals Intact: Δ Yes Δ No										Custody Seal No.:									
Cooler Temperature(s) °C and Other Remarks:										1.4/1.4 508									



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# Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-174497-1

SDG Number: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Login Number: 174497**

**List Source: Eurofins Eaton Analytical Pomona**

**List Number: 1**

**Creator: Segura, Ryan**

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: 380-174497-1

SDG Number: Quarterly: Moanalua Wells, Halawa Wells Units 1&2 P1

**Login Number: 174497**

**List Source: Eurofins Calscience**

**List Number: 2**

**List Creation: 10/03/25 11:37 AM**

**Creator: Ferreira, Bruno**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	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	