

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 310
Honolulu, Hawaii 96843

Generated 6/2/2026 5:26:59 PM

JOB DESCRIPTION

RED-HILL
Weekly: Aiea Gulch Wells Pump 1
RUSH Weekly Red Hill

JOB NUMBER

380-215091-1

Eurofins 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 Drinking Water and Wastewater West, LLC Project Manager.

Compliance Statement

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

Authorization



Authorized for release by
Maria Lopez, Project Manager
Maria.Lopez@et.eurofinsus.com
(626)386-1100

Generated
6/2/2026 5:26:59 PM



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
QC Sample Results	15
QC Association Summary	29
Lab Chronicle	31
Certification Summary	32
Method Summary	34
Sample Summary	35
Chain of Custody	36
Receipt Checklists	38

Definitions/Glossary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
F1	MS and/or MSD recovery exceeds control limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

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

Job ID: 380-215091-1

Job ID: 380-215091-1

Eurofins Pomona

Job Narrative 380-215091-1

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 5/20/2026 9:27 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C.

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 570-741583.

Method 625.1 SIM: 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 570-741583.

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

Gasoline Range Organics

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

Diesel Range Organics

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

Eurofins Pomona

Detection Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**
PWSID Number: HI0000331

Lab Sample ID: 380-215091-1

No Detections.

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-2

No Detections.

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

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-1

Date Collected: 05/18/26 11:17

Matrix: Drinking Water

Date Received: 05/20/26 09:27

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2,4'-DDD	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2,4'-DDE	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2,4'-DDT	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
2-Methylnaphthalene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
4,4'-DDD	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
4,4'-DDE	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
4,4'-DDT	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Acenaphthene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Acenaphthylene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Acetochlor	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Alachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
alpha-BHC	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
alpha-Chlordane	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Anthracene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 14:50	1
Atrazine	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Benz(a)anthracene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Benzo[a]pyrene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 14:50	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 14:50	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 14:50	1
beta-BHC	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		05/27/26 14:14	05/28/26 14:50	1
Bromacil	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Butachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Butylbenzylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 14:50	1
Chlorobenzilate	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Chloroneb	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Chlorpyrifos	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Chrysene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 14:50	1
delta-BHC	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		05/27/26 14:14	05/28/26 14:50	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Dieldrin	<0.0098		0.0098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Diethylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 14:50	1
Dimethylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 14:50	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		05/27/26 14:14	05/28/26 14:50	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Endosulfan sulfate	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Endrin	<0.0098		0.0098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Endrin aldehyde	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
EPTC	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-1

**Date Collected: 05/18/26 11:17
Date Received: 05/20/26 09:27**

**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
Fluoranthene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Fluorene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
gamma-Chlordane	<0.049	*+	0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Heptachlor	<0.0098		0.0098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Hexachlorobenzene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Isophorone	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Lindane	<0.0098	^3+	0.0098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Malathion	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Methoxychlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Metolachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Molinate	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Naphthalene	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Parathion	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Phenanthrene	<0.039		0.039	ug/L		05/27/26 14:14	05/28/26 14:50	1
Propachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Pyrene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Simazine	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Terbacil	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Terbutylazine	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Thiobencarb	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		05/27/26 14:14	05/28/26 14:50	1
trans-Nonachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 14:50	1
Trifluralin	<0.098		0.098	ug/L		05/27/26 14:14	05/28/26 14:50	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	05/27/26 14:14	05/28/26 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	05/27/26 14:14	05/28/26 14:50	1
Perylene-d12	88		70 - 130	05/27/26 14:14	05/28/26 14:50	1
Triphenylphosphate	103		70 - 130	05/27/26 14:14	05/28/26 14:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
2-Methylnaphthalene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Acenaphthene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Acenaphthylene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Anthracene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Benzo[a]anthracene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Benzo[a]pyrene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Chrysene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-1

Date Collected: 05/18/26 11:17
Date Received: 05/20/26 09:27

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
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Fluoranthene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Fluorene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Naphthalene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Phenanthrene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1
Pyrene	<0.19		0.19	ug/L		05/21/26 05:09	05/22/26 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	79		28 - 127	05/21/26 05:09	05/22/26 18:34	1
2-Fluorobiphenyl (Surr)	73		31 - 120	05/21/26 05:09	05/22/26 18:34	1
2-Fluorophenol (Surr)	37		17 - 120	05/21/26 05:09	05/22/26 18:34	1
Nitrobenzene-d5 (Surr)	74		27 - 120	05/21/26 05:09	05/22/26 18:34	1
Phenol-d6 (Surr)	24		10 - 120	05/21/26 05:09	05/22/26 18:34	1
p-Terphenyl-d14 (Surr)	79		45 - 120	05/21/26 05:09	05/22/26 18:34	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	05/21/26 05:09	06/02/26 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	61		33 - 139	05/21/26 05:09	06/02/26 11:39	1
2-Fluorobiphenyl (Surr)	75		33 - 126	05/21/26 05:09	06/02/26 11:39	1
2-Fluorophenol (Surr)	50		12 - 120	05/21/26 05:09	06/02/26 11:39	1
Nitrobenzene-d5 (Surr)	82		36 - 120	05/21/26 05:09	06/02/26 11:39	1
Phenol-d6 (Surr)	29		10 - 120	05/21/26 05:09	06/02/26 11:39	1
p-Terphenyl-d14 (Surr)	77		47 - 131	05/21/26 05:09	06/02/26 11:39	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			05/30/26 00:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		38 - 134		05/30/26 00:08	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		05/24/26 09:44	05/27/26 06:29	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		05/24/26 09:44	05/27/26 06:29	1
C8-C18	<26		26	ug/L		05/24/26 09:44	05/27/26 06:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	116		60 - 130	05/24/26 09:44	05/27/26 06:29	1

Client Sample Results

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

Job ID: 380-215091-1
 SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 1
 (331-201-TP071)**

Lab Sample ID: 380-215091-2

Date Collected: 05/18/26 11:17

Matrix: Water

Date Received: 05/20/26 09:27

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	-		05/29/26 22:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		38 - 134				05/29/26 22:59	1

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

Action Limit Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**
PWSID Number: HI0000331

Lab Sample ID: 380-215091-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	RL	Method	Prep Type
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098	^3+	ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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)
380-215091-1	AIEA GULCH WELLS PUMP 1 (	98	88	103

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)
380-215095-I-1-A MS	Matrix Spike	95	87	112
380-215096-I-1-A DU	Duplicate	98	92	108
LCS 380-229858/23-A	Lab Control Sample	96	97	109
MB 380-229858/21-A	Method Blank	99	86	103
MRL 380-229858/22-A	Lab Control Sample	97	88	110

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)
380-215091-1	AIEA GULCH WELLS PUMP 1 (	61	75	50	82	29	77

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)
MB 570-741583/1-A	Method Blank	63	74	57	83	34	75

Surrogate Legend
 TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)
 NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-215091-1

Project/Site: RED-HILL

SDG: Weekly: Aiea Gulch Wells Pump 1

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)
380-215091-1	AIEA GULCH WELLS PUMP 1 (	79	73	37	74	24	79

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)
LCS 570-741583/2-A	Lab Control Sample	84	77	55	66	36	86
LCSD 570-741583/3-A	Lab Control Sample Dup	87	75	54	65	36	87
MB 570-741583/1-A	Method Blank	90	78	53	80	32	82

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)
380-215091-1	AIEA GULCH WELLS PUMP 1 (	95

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)
380-215091-2	TB: AIEA GULCH WELLS PUMI	92
380-215107-C-1 MS	Matrix Spike	99
380-215107-C-1 MSD	Matrix Spike Duplicate	99
LCS 570-746091/3	Lab Control Sample	99
LCSD 570-746091/4	Lab Control Sample Dup	101

Eurofins Pomona

Surrogate Summary

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

Job ID: 380-215091-1
 SDG: Weekly: Aiea Gulch Wells Pump 1

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)
MB 570-746091/6	Method Blank	97
MRL 570-746091/5	Lab Control Sample	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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)
380-215091-1	AIEA GULCH WELLS PUMP 1 (	116

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)
380-215489-I-1-A MS	Matrix Spike	104
380-215489-J-1-A MSD	Matrix Spike Duplicate	115
LCS 570-743620/2-A	Lab Control Sample	108
LCSD 570-743620/3-A	Lab Control Sample Dup	108
MB 570-743620/1-A	Method Blank	107
MRL 570-743620/4-A	Lab Control Sample	107

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-215091-1
 SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MB 380-229858/21-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229858

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2,4'-DDD	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2,4'-DDE	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2,4'-DDT	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
2-Methylnaphthalene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
4,4'-DDD	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
4,4'-DDE	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
4,4'-DDT	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Acenaphthene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Acenaphthylene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Acetochlor	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Alachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
alpha-BHC	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
alpha-Chlordane	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Anthracene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 11:29	1
Atrazine	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Benz(a)anthracene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Benzo[a]pyrene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 11:29	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 11:29	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 11:29	1
beta-BHC	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		05/27/26 14:14	05/28/26 11:29	1
Bromacil	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Butachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Butylbenzylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 11:29	1
Chlorobenzilate	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Chloroneb	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Chlorpyrifos	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Chrysene	<0.020		0.020	ug/L		05/27/26 14:14	05/28/26 11:29	1
delta-BHC	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		05/27/26 14:14	05/28/26 11:29	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Dieldrin	<0.0099		0.0099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Diethylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 11:29	1
Dimethylphthalate	<0.49		0.49	ug/L		05/27/26 14:14	05/28/26 11:29	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		05/27/26 14:14	05/28/26 11:29	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Endosulfan sulfate	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Endrin	<0.0099		0.0099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Endrin aldehyde	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
EPTC	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MB 380-229858/21-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 229858

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Fluorene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
gamma-Chlordane	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Heptachlor	<0.0099		0.0099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Hexachlorobenzene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Isophorone	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Lindane	<0.0099	^3+	0.0099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Malathion	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Methoxychlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Metolachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Molinate	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Naphthalene	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Parathion	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Phenanthrene	<0.039		0.039	ug/L		05/27/26 14:14	05/28/26 11:29	1
Propachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Pyrene	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Simazine	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Terbacil	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Terbutylazine	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Thiobencarb	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		05/27/26 14:14	05/28/26 11:29	1
trans-Nonachlor	<0.049		0.049	ug/L		05/27/26 14:14	05/28/26 11:29	1
Trifluralin	<0.099		0.099	ug/L		05/27/26 14:14	05/28/26 11:29	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Undecane	4.76	T J N	ug/L		3.18	1120-21-4	05/27/26 14:14	05/28/26 11:29	1
Plumbane, diethyldimethyl-	0.884	T J N	ug/L		3.31	1762-27-2	05/27/26 14:14	05/28/26 11:29	1
Cyclohexasiloxane, dodecamethyl-	0.714	T J N	ug/L		3.93	540-97-6	05/27/26 14:14	05/28/26 11:29	1
9-Octadecenamamide, (Z)-	0.923	T J N	ug/L		7.97	301-02-0	05/27/26 14:14	05/28/26 11:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	99		70 - 130	05/27/26 14:14	05/28/26 11:29	1
Perylene-d12	86		70 - 130	05/27/26 14:14	05/28/26 11:29	1
Triphenylphosphate	103		70 - 130	05/27/26 14:14	05/28/26 11:29	1

Lab Sample ID: LCS 380-229858/23-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.96	1.99		ug/L		101	70 - 130
2,4'-DDD	1.96	2.18		ug/L		111	70 - 130
2,4'-DDE	1.96	2.03		ug/L		103	70 - 130
2,4'-DDT	1.96	2.21		ug/L		113	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-215091-1
 SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: LCS 380-229858/23-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1.96	2.02		ug/L		103	70 - 130
2,6-Dinitrotoluene	1.96	1.96		ug/L		100	70 - 130
2-Methylnaphthalene	1.96	1.99		ug/L		102	70 - 130
4,4'-DDD	1.96	2.29		ug/L		117	70 - 130
4,4'-DDE	1.96	2.06		ug/L		105	70 - 130
4,4'-DDT	1.96	2.34		ug/L		119	70 - 130
Acenaphthene	1.96	2.01		ug/L		103	70 - 130
Acenaphthylene	1.96	1.82		ug/L		93	70 - 130
Acetochlor	1.96	2.13		ug/L		109	70 - 130
Alachlor	1.96	2.13		ug/L		109	70 - 130
alpha-BHC	1.96	2.06		ug/L		105	70 - 130
alpha-Chlordane	1.96	2.48		ug/L		127	70 - 130
Anthracene	1.96	2.03		ug/L		103	70 - 130
Atrazine	1.96	2.24		ug/L		114	70 - 130
Benz(a)anthracene	1.96	2.36		ug/L		120	70 - 130
Benzo[a]pyrene	1.96	2.08		ug/L		106	70 - 130
Benzo[b]fluoranthene	1.96	2.32		ug/L		118	70 - 130
Benzo[g,h,i]perylene	1.96	2.25		ug/L		115	70 - 130
Benzo[k]fluoranthene	1.96	2.16		ug/L		110	70 - 130
beta-BHC	1.96	2.22		ug/L		113	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	2.08		ug/L		106	70 - 130
Bromacil	1.96	2.27		ug/L		116	70 - 130
Butachlor	1.96	2.20		ug/L		112	70 - 130
Butylbenzylphthalate	1.96	2.22		ug/L		113	70 - 130
Chlorobenzilate	1.96	2.20		ug/L		112	70 - 130
Chloroneb	1.96	2.15		ug/L		110	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	1.97		ug/L		100	70 - 130
Chlorpyrifos	1.96	2.21		ug/L		113	70 - 130
Chrysene	1.96	2.09		ug/L		107	70 - 130
delta-BHC	1.96	2.01		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.96	2.28		ug/L		116	70 - 130
Dibenz(a,h)anthracene	1.96	2.19		ug/L		112	70 - 130
Diclorvos (DDVP)	1.96	2.08		ug/L		106	70 - 130
Dieldrin	1.96	2.20		ug/L		112	70 - 130
Diethylphthalate	1.96	2.11		ug/L		108	70 - 130
Dimethylphthalate	1.96	2.08		ug/L		106	70 - 130
Di-n-butyl phthalate	3.92	4.35		ug/L		111	70 - 130
Di-n-octyl phthalate	1.96	2.00		ug/L		102	70 - 130
Endosulfan I (Alpha)	1.96	2.23		ug/L		113	70 - 130
Endosulfan II (Beta)	1.96	2.22		ug/L		113	70 - 130
Endosulfan sulfate	1.96	2.11		ug/L		107	70 - 130
Endrin	1.96	2.42		ug/L		124	70 - 130
Endrin aldehyde	1.96	2.26		ug/L		115	60 - 130
EPTC	1.96	2.03		ug/L		103	70 - 130
Fluoranthene	1.96	2.15		ug/L		110	70 - 130
Fluorene	1.96	2.10		ug/L		107	70 - 130
gamma-Chlordane	1.96	2.59	*+	ug/L		132	70 - 130
Heptachlor	1.96	1.92		ug/L		98	70 - 130
Heptachlor epoxide (isomer B)	1.96	2.44		ug/L		125	70 - 130

Eurofins Pomona

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: LCS 380-229858/23-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	1.96	1.96		ug/L		100	70 - 130
Hexachlorocyclopentadiene	1.96	1.66		ug/L		85	70 - 130
Indeno[1,2,3-cd]pyrene	1.96	2.28		ug/L		116	70 - 130
Isophorone	1.96	2.17		ug/L		110	70 - 130
Lindane	1.96	2.34		ug/L		119	70 - 130
Malathion	1.96	2.14		ug/L		109	70 - 130
Methoxychlor	1.96	2.44		ug/L		124	70 - 130
Metolachlor	1.96	2.20		ug/L		112	70 - 130
Molinate	1.96	2.07		ug/L		106	70 - 130
Naphthalene	1.96	1.92		ug/L		98	70 - 130
Parathion	1.96	2.23		ug/L		114	70 - 130
Pendimethalin (Penoxaline)	1.96	2.12		ug/L		108	70 - 130
Phenanthrene	1.96	2.12		ug/L		108	70 - 130
Propachlor	1.96	2.14		ug/L		109	70 - 130
Pyrene	1.96	2.19		ug/L		112	70 - 130
Simazine	1.96	2.19		ug/L		111	70 - 130
Terbacil	1.96	2.25		ug/L		115	70 - 130
Terbutylazine	1.96	2.21		ug/L		113	70 - 130
Thiobencarb	1.96	2.09		ug/L		106	70 - 130
trans-Nonachlor	1.96	2.47		ug/L		126	70 - 130
Trifluralin	1.96	1.99		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	109		70 - 130

Lab Sample ID: MRL 380-229858/22-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0983	0.110		ug/L		112	50 - 150
2,4'-DDD	0.0983	0.109		ug/L		111	50 - 150
2,4'-DDE	0.0983	0.112		ug/L		114	50 - 150
2,4'-DDT	0.0983	0.125		ug/L		128	50 - 150
2,4-Dinitrotoluene	0.0983	0.114		ug/L		116	50 - 150
2,6-Dinitrotoluene	0.0983	0.134		ug/L		136	50 - 150
2-Methylnaphthalene	0.0983	0.104		ug/L		106	50 - 150
4,4'-DDD	0.0983	0.127		ug/L		129	50 - 150
4,4'-DDE	0.0983	0.107		ug/L		109	50 - 150
4,4'-DDT	0.0983	0.126		ug/L		128	50 - 150
Acenaphthene	0.0983	0.0973	J	ug/L		99	50 - 150
Acenaphthylene	0.0983	0.0862	J	ug/L		88	50 - 150
Acetochlor	0.0983	0.116		ug/L		118	50 - 150
Alachlor	0.0492	0.0564		ug/L		115	50 - 150
alpha-BHC	0.0983	0.106		ug/L		108	50 - 150
alpha-Chlordane	0.0246	0.0329	J	ug/L		134	50 - 150

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MRL 380-229858/22-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	0.0197	0.0228		ug/L		116	50 - 150
Atrazine	0.0492	0.0624		ug/L		127	50 - 150
Benz(a)anthracene	0.0492	0.0566		ug/L		115	50 - 150
Benzo[a]pyrene	0.0197	0.0245		ug/L		124	50 - 150
Benzo[b]fluoranthene	0.0197	0.0233		ug/L		118	50 - 150
Benzo[g,h,i]perylene	0.0492	0.0491		ug/L		100	50 - 150
Benzo[k]fluoranthene	0.0197	0.0272		ug/L		139	50 - 150
beta-BHC	0.0983	0.112		ug/L		114	50 - 150
Bis(2-ethylhexyl) phthalate	0.590	0.616		ug/L		104	50 - 150
Bromacil	0.0983	0.138		ug/L		140	50 - 150
Butachlor	0.0492	0.0614		ug/L		125	50 - 150
Butylbenzylphthalate	0.492	0.559		ug/L		114	50 - 150
Chlorobenzilate	0.0983	0.115		ug/L		117	50 - 150
Chloroneb	0.0983	0.110		ug/L		112	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0983	0.0980		ug/L		100	50 - 150
Chlorpyrifos	0.0492	0.0643		ug/L		131	50 - 150
Chrysene	0.0197	0.0275		ug/L		140	50 - 150
delta-BHC	0.0983	0.105		ug/L		106	50 - 150
Di(2-ethylhexyl)adipate	0.590	0.667		ug/L		113	50 - 150
Dibenz(a,h)anthracene	0.0492	0.0469	J	ug/L		95	50 - 150
Diclorvos (DDVP)	0.0492	0.0574		ug/L		117	50 - 150
Dieldrin	0.00983	0.0108		ug/L		110	50 - 150
Diethylphthalate	0.492	0.513		ug/L		104	50 - 150
Dimethylphthalate	0.492	0.514		ug/L		105	50 - 150
Di-n-butyl phthalate	0.492	0.681	J	ug/L		139	49 - 243
Di-n-octyl phthalate	0.0983	0.103		ug/L		104	50 - 150
Endosulfan I (Alpha)	0.0983	0.120		ug/L		122	50 - 150
Endosulfan II (Beta)	0.0983	0.121		ug/L		123	50 - 150
Endosulfan sulfate	0.0983	0.108		ug/L		110	50 - 150
Endrin	0.00983	0.0142		ug/L		144	50 - 150
Endrin aldehyde	0.0983	0.130		ug/L		133	50 - 150
EPTC	0.0983	0.104		ug/L		105	50 - 150
Fluoranthene	0.0983	0.113		ug/L		115	50 - 150
Fluorene	0.0492	0.0533		ug/L		108	50 - 150
gamma-Chlordane	0.0246	0.0332	J	ug/L		135	50 - 150
Heptachlor	0.00983	0.0132		ug/L		135	50 - 150
Heptachlor epoxide (isomer B)	0.00983	0.0137		ug/L		139	50 - 150
Hexachlorobenzene	0.0492	0.0467	J	ug/L		95	50 - 150
Hexachlorocyclopentadiene	0.0492	0.0398	J	ug/L		81	50 - 150
Indeno[1,2,3-cd]pyrene	0.0492	0.0527		ug/L		107	50 - 150
Isophorone	0.0983	0.126		ug/L		128	50 - 150
Lindane	0.00983	0.0167	^3+	ug/L		170	50 - 150
Malathion	0.0983	0.110		ug/L		112	50 - 150
Methoxychlor	0.0492	0.0643		ug/L		131	50 - 150
Metolachlor	0.0492	0.0593		ug/L		121	50 - 150
Molinate	0.0983	0.108		ug/L		109	50 - 150
Naphthalene	0.0983	0.0988		ug/L		101	50 - 150
Parathion	0.0983	0.0977	J	ug/L		99	50 - 150
Pendimethalin (Penoxaline)	0.0983	0.111		ug/L		113	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MRL 380-229858/22-A
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	0.0393	0.0446		ug/L		113	50 - 150
Propachlor	0.0492	0.0589		ug/L		120	50 - 150
Pyrene	0.0492	0.0570		ug/L		116	50 - 150
Simazine	0.0492	0.0637		ug/L		130	50 - 150
Terbacil	0.0983	0.111		ug/L		113	50 - 150
Terbutylazine	0.0983	0.125		ug/L		127	50 - 150
Thiobencarb	0.0983	0.116		ug/L		118	50 - 150
trans-Nonachlor	0.0246	0.0338	J	ug/L		137	50 - 150
Trifluralin	0.0983	0.110		ug/L		112	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	88		70 - 130
Triphenylphosphate	110		70 - 130

Lab Sample ID: 380-215095-I-1-A MS
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.95	1.96		ug/L		99	70 - 130
2,4'-DDD	<0.098		1.95	2.10		ug/L		108	70 - 130
2,4'-DDE	<0.098		1.95	1.99		ug/L		102	70 - 130
2,4'-DDT	<0.098		1.95	2.14		ug/L		109	70 - 130
2,4-Dinitrotoluene	<0.098		1.95	2.15		ug/L		110	70 - 130
2,6-Dinitrotoluene	<0.098		1.95	2.12		ug/L		109	70 - 130
2-Methylnaphthalene	<0.098		1.95	1.96		ug/L		99	70 - 130
4,4'-DDD	<0.098		1.95	2.25		ug/L		115	70 - 130
4,4'-DDE	<0.098		1.95	2.11		ug/L		108	70 - 130
4,4'-DDT	<0.098		1.95	2.27		ug/L		116	70 - 130
Acenaphthene	<0.098		1.95	2.02		ug/L		103	70 - 130
Acenaphthylene	<0.098		1.95	1.86		ug/L		95	70 - 130
Acetochlor	<0.098		1.95	2.11		ug/L		108	70 - 130
Alachlor	<0.049		1.95	2.21		ug/L		113	70 - 130
alpha-BHC	<0.098		1.95	2.10		ug/L		107	70 - 130
alpha-Chlordane	<0.049		1.95	2.56		ug/L		129	70 - 130
Anthracene	<0.020		1.95	2.02		ug/L		103	70 - 130
Atrazine	<0.049		1.95	2.22		ug/L		114	70 - 130
Benz(a)anthracene	<0.049		1.95	2.29		ug/L		117	70 - 130
Benzo[a]pyrene	<0.020		1.95	1.97		ug/L		101	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	2.18		ug/L		111	70 - 130
Benzo[g,h,i]perylene	<0.049		1.95	2.03		ug/L		104	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.11		ug/L		108	70 - 130
beta-BHC	<0.098		1.95	2.20		ug/L		113	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.95	2.08		ug/L		106	70 - 130
Bromacil	<0.098		1.95	2.30		ug/L		115	70 - 130
Butachlor	<0.049		1.95	2.24		ug/L		115	70 - 130
Butylbenzylphthalate	<0.49		1.95	2.14		ug/L		109	70 - 130

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: 380-215095-I-1-A MS
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzilate	<0.098		1.95	2.14		ug/L		109	70 - 130
Chloroneb	<0.098		1.95	2.13		ug/L		109	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.95	2.03		ug/L		104	70 - 130
Chlorpyrifos	<0.049		1.95	2.19		ug/L		112	70 - 130
Chrysene	<0.020		1.95	2.04		ug/L		105	70 - 130
delta-BHC	<0.098		1.95	2.09		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.95	2.21		ug/L		113	70 - 130
Dibenz(a,h)anthracene	<0.049		1.95	2.05		ug/L		105	70 - 130
Diclorvos (DDVP)	<0.049		1.95	2.06		ug/L		105	70 - 130
Dieldrin	0.083		1.95	2.28		ug/L		112	70 - 130
Diethylphthalate	<0.49		1.95	2.14		ug/L		110	70 - 130
Dimethylphthalate	<0.49		1.95	2.15		ug/L		110	70 - 130
Di-n-butyl phthalate	<0.98		3.91	4.31		ug/L		110	70 - 130
Di-n-octyl phthalate	<0.098		1.95	1.99		ug/L		102	70 - 130
Endosulfan I (Alpha)	<0.098		1.95	2.21		ug/L		113	70 - 130
Endosulfan II (Beta)	<0.098		1.95	2.23		ug/L		114	70 - 130
Endosulfan sulfate	<0.098		1.95	2.09		ug/L		107	70 - 130
Endrin	<0.0098		1.95	2.38		ug/L		122	70 - 130
Endrin aldehyde	<0.098		1.95	2.27		ug/L		116	60 - 130
EPTC	<0.098		1.95	2.02		ug/L		103	70 - 130
Fluoranthene	<0.098		1.95	2.12		ug/L		109	70 - 130
Fluorene	<0.049		1.95	2.10		ug/L		108	70 - 130
gamma-Chlordane	<0.049	*+ F1	1.95	2.65	F1	ug/L		134	70 - 130
Heptachlor	<0.0098		1.95	1.98		ug/L		101	70 - 130
Heptachlor epoxide (isomer B)	0.016		1.95	2.53		ug/L		129	70 - 130
Hexachlorobenzene	<0.049		1.95	1.99		ug/L		102	70 - 130
Hexachlorocyclopentadiene	<0.049		1.95	1.63		ug/L		83	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.95	2.10		ug/L		108	70 - 130
Isophorone	<0.098		1.95	2.22		ug/L		114	70 - 130
Lindane	<0.0098	^3+	1.95	2.31		ug/L		118	70 - 130
Malathion	<0.098		1.95	2.20		ug/L		112	70 - 130
Methoxychlor	<0.049		1.95	2.42		ug/L		124	70 - 130
Metolachlor	<0.049		1.95	2.24		ug/L		115	70 - 130
Molinate	<0.098		1.95	2.04		ug/L		104	70 - 130
Naphthalene	<0.098		1.95	1.88		ug/L		96	70 - 130
Parathion	<0.098		1.95	2.19		ug/L		112	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.95	2.02		ug/L		104	70 - 130
Phenanthrene	<0.039		1.95	2.15		ug/L		110	70 - 130
Propachlor	<0.049		1.95	2.13		ug/L		109	70 - 130
Pyrene	<0.049		1.95	2.17		ug/L		111	70 - 130
Simazine	<0.049		1.95	2.22		ug/L		114	70 - 130
Terbacil	<0.098		1.95	2.26		ug/L		115	70 - 130
Terbutylazine	<0.098		1.95	2.18		ug/L		112	70 - 130
Thiobencarb	<0.098		1.95	2.08		ug/L		106	70 - 130
trans-Nonachlor	<0.049		1.95	2.51		ug/L		128	70 - 130
Trifluralin	<0.098		1.95	1.98		ug/L		101	70 - 130

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: 380-215095-I-1-A MS
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 229858

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	87		70 - 130
Triphenylphosphate	112		70 - 130

Lab Sample ID: 380-215096-I-1-A DU
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
2,4'-DDD	<0.098		<0.098		ug/L		NC	20
2,4'-DDE	<0.098		<0.098		ug/L		NC	20
2,4'-DDT	<0.098		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
4,4'-DDD	<0.098		<0.098		ug/L		NC	20
4,4'-DDE	<0.098		<0.098		ug/L		NC	20
4,4'-DDT	<0.098		<0.098		ug/L		NC	20
Acenaphthene	<0.098		<0.098		ug/L		NC	20
Acenaphthylene	<0.098		<0.098		ug/L		NC	20
Acetochlor	<0.098		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.049		<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	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.098		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.59		ug/L		NC	20
Bromacil	<0.098		<0.098		ug/L		NC	20
Butachlor	<0.049		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.49		ug/L		NC	20
Chlorobenzilate	<0.098		<0.098		ug/L		NC	20
Chloroneb	<0.098		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.098		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.098		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.049		ug/L		NC	20
Dieldrin	0.095		0.0814		ug/L		15	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: 380-215096-I-1-A DU
Matrix: Water
Analysis Batch: 230071

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 229858

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Dimethylphthalate	<0.49		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.98		<0.98		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.098		ug/L		NC	20
Endrin	<0.0098		<0.0098		ug/L		NC	20
Endrin aldehyde	<0.098		<0.098		ug/L		NC	20
EPTC	<0.098		<0.098		ug/L		NC	20
Fluoranthene	<0.098		<0.098		ug/L		NC	20
Fluorene	<0.049		<0.049		ug/L		NC	20
gamma-Chlordane	<0.049	*+	<0.049	*+	ug/L		NC	20
Heptachlor	<0.0098		<0.0098		ug/L		NC	20
Heptachlor epoxide (isomer B)	0.012		0.0152	F5	ug/L		26	20
Hexachlorobenzene	<0.049		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.049		ug/L		NC	20
Isophorone	<0.098		<0.098		ug/L		NC	20
Lindane	<0.0098	^3+	<0.0098		ug/L		NC	20
Malathion	<0.098		<0.098		ug/L		NC	20
Methoxychlor	<0.049		<0.049		ug/L		NC	20
Metolachlor	<0.049		<0.049		ug/L		NC	20
Molinate	<0.098		<0.098		ug/L		NC	20
Naphthalene	<0.098		<0.098		ug/L		NC	20
Parathion	<0.098		<0.098		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098		<0.098		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.049		ug/L		NC	20
Pyrene	<0.049		<0.049		ug/L		NC	20
Simazine	<0.049		<0.049		ug/L		NC	20
Terbacil	<0.098		<0.098		ug/L		NC	20
Terbutylazine	<0.098		<0.098		ug/L		NC	20
Thiobencarb	<0.098		<0.098		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.049		ug/L		NC	20
Trifluralin	<0.098		<0.098		ug/L		NC	20

Surrogate	DU %Recovery	DU Qualifier	Limits
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	108		70 - 130

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MB 570-741583/1-A
Matrix: Water
Analysis Batch: 747560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741583

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>MB MB 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>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	63		33 - 139				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	74		33 - 126				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	57		12 - 120				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	83		36 - 120				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	34		10 - 120				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	75		47 - 131				<i>05/20/26 08:18</i>	<i>06/02/26 08:24</i>	<i>1</i>

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

Lab Sample ID: MB 570-741583/1-A
Matrix: Water
Analysis Batch: 742601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 741583

<i>Analyte</i>	<i>Result</i>	<i>MB MB Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>1-Methylnaphthalene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>2-Methylnaphthalene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Acenaphthene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Acenaphthylene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Anthracene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Benzo[a]anthracene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Benzo[a]pyrene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Benzo[b]fluoranthene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Benzo[g,h,i]perylene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Benzo[k]fluoranthene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Chrysene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Dibenz(a,h)anthracene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Fluoranthene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Fluorene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Indeno[1,2,3-cd]pyrene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Naphthalene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Phenanthrene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Pyrene</i>	<0.20		0.20	ug/L		<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Surrogate</i>	<i>%Recovery</i>	<i>MB MB Qualifier</i>	<i>Limits</i>			<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	90		28 - 127			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	78		31 - 120			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	53		17 - 120			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	80		27 - 120			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	32		10 - 120			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	82		45 - 120			<i>05/20/26 08:18</i>	<i>05/21/26 21:27</i>	<i>1</i>

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: LCS 570-741583/2-A
Matrix: Water
Analysis Batch: 742601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 741583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.8		ug/L		74	47 - 120
2-Methylnaphthalene	20.0	13.7		ug/L		68	43 - 120
Acenaphthene	20.0	16.6		ug/L		83	60 - 132
Acenaphthylene	20.0	16.4		ug/L		82	54 - 126
Anthracene	20.0	18.7		ug/L		94	43 - 120
Benzo[a]anthracene	20.0	18.4		ug/L		92	42 - 133
Benzo[a]pyrene	20.0	21.4		ug/L		107	32 - 148
Benzo[b]fluoranthene	20.0	20.0		ug/L		100	42 - 140
Benzo[g,h,i]perylene	20.0	19.2		ug/L		96	1 - 195
Benzo[k]fluoranthene	20.0	19.2		ug/L		96	25 - 146
Chrysene	20.0	18.1		ug/L		90	44 - 140
Dibenz(a,h)anthracene	20.0	20.1		ug/L		100	1 - 200
Fluoranthene	20.0	19.6		ug/L		98	43 - 121
Fluorene	20.0	17.1		ug/L		86	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	19.0		ug/L		95	1 - 151
Naphthalene	20.0	14.1		ug/L		70	36 - 120
Phenanthrene	20.0	18.2		ug/L		91	65 - 120
Pyrene	20.0	17.0		ug/L		85	70 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	84		28 - 127
2-Fluorobiphenyl (Surr)	77		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	86		45 - 120

Lab Sample ID: LCSD 570-741583/3-A
Matrix: Water
Analysis Batch: 742601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 741583

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
1-Methylnaphthalene	20.0	14.3		ug/L		71	47 - 120	3	20
2-Methylnaphthalene	20.0	13.7		ug/L		69	43 - 120	0	20
Acenaphthene	20.0	16.4		ug/L		82	60 - 132	1	29
Acenaphthylene	20.0	16.1		ug/L		81	54 - 126	2	45
Anthracene	20.0	18.7		ug/L		93	43 - 120	0	40
Benzo[a]anthracene	20.0	18.2		ug/L		91	42 - 133	1	32
Benzo[a]pyrene	20.0	20.8		ug/L		104	32 - 148	3	43
Benzo[b]fluoranthene	20.0	19.5		ug/L		97	42 - 140	2	43
Benzo[g,h,i]perylene	20.0	18.8		ug/L		94	1 - 195	2	61
Benzo[k]fluoranthene	20.0	19.6		ug/L		98	25 - 146	2	38
Chrysene	20.0	17.8		ug/L		89	44 - 140	1	53
Dibenz(a,h)anthracene	20.0	19.6		ug/L		98	1 - 200	3	75
Fluoranthene	20.0	19.7		ug/L		98	43 - 121	0	40
Fluorene	20.0	16.8		ug/L		84	70 - 120	2	23
Indeno[1,2,3-cd]pyrene	20.0	18.8		ug/L		94	1 - 151	1	60
Naphthalene	20.0	14.0		ug/L		70	36 - 120	0	39

Eurofins Pomona

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: LCSD 570-741583/3-A
Matrix: Water
Analysis Batch: 742601

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 741583

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	17.7		ug/L		89	65 - 120	3	24
Pyrene	20.0	17.2		ug/L		86	70 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	87		28 - 127
2-Fluorobiphenyl (Surr)	75		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	87		45 - 120

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

Lab Sample ID: MB 570-746091/6
Matrix: Water
Analysis Batch: 746091

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			05/29/26 14:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134		05/29/26 14:45	1

Lab Sample ID: LCS 570-746091/3
Matrix: Water
Analysis Batch: 746091

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	416		ug/L		104	78 - 120

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

Lab Sample ID: LCSD 570-746091/4
Matrix: Water
Analysis Batch: 746091

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	416		ug/L		104	78 - 120	0	10

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

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: MRL 570-746091/5
Matrix: Water
Analysis Batch: 746091

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	12.9		ug/L		129	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		101					38 - 134

Lab Sample ID: 380-215107-C-1 MS
Matrix: Water
Analysis Batch: 746091

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	393		ug/L		98	68 - 122
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		99							38 - 134

Lab Sample ID: 380-215107-C-1 MSD
Matrix: Water
Analysis Batch: 746091

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	403		ug/L		101	68 - 122	2	18
Surrogate		MSD %Recovery		MSD Qualifier					Limits		
4-Bromofluorobenzene (Surr)		99							38 - 134		

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

Lab Sample ID: MB 570-743620/1-A
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 743620

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		05/24/26 09:43	05/26/26 22:11	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		05/24/26 09:43	05/26/26 22:11	1
C8-C18	<25		25	ug/L		05/24/26 09:43	05/26/26 22:11	1
Surrogate		MB %Recovery	MB Qualifier			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)		107				05/24/26 09:43	05/26/26 22:11	1

Lab Sample ID: LCS 570-743620/2-A
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743620

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1470		ug/L		92	56 - 127

Eurofins Pomona

QC Sample Results

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

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

Lab Sample ID: LCS 570-743620/2-A
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743620

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

Lab Sample ID: LCSD 570-743620/3-A
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 743620

	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	1600	1420		ug/L		89	56 - 127	3	23
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

Lab Sample ID: MRL 570-743620/4-A
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 743620

	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte C10-C28	0.0200	0.0235	J	mg/L		117	50 - 150		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

Lab Sample ID: 380-215489-I-1-A MS
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 743620

	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte C10-C28	<26		1600	1450		ug/L		89	70 - 130		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											

Lab Sample ID: 380-215489-J-1-A MSD
Matrix: Water
Analysis Batch: 744450

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 743620

	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	<26		1610	1620		ug/L		100	70 - 130	12	20
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											

QC Association Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

GC/MS Semi VOA

Prep Batch: 229858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	525.2	
MB 380-229858/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-229858/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-229858/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-215095-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-215096-I-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 230071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	525.2	229858
MB 380-229858/21-A	Method Blank	Total/NA	Water	525.2	229858
LCS 380-229858/23-A	Lab Control Sample	Total/NA	Water	525.2	229858
MRL 380-229858/22-A	Lab Control Sample	Total/NA	Water	525.2	229858
380-215095-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	229858
380-215096-I-1-A DU	Duplicate	Total/NA	Water	525.2	229858

Prep Batch: 741583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	625.1	
MB 570-741583/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-741583/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-741583/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 742601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-741583/1-A	Method Blank	Total/NA	Water	625.1 SIM	741583
LCS 570-741583/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	741583
LCSD 570-741583/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	741583

Analysis Batch: 743023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	625.1 SIM	741583

Analysis Batch: 747560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	625.1	741583
MB 570-741583/1-A	Method Blank	Total/NA	Water	625.1	741583

GC VOA

Analysis Batch: 746091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	8015B GRO LL	
380-215091-2	TB: AIEA GULCH WELLS PUMP 1 (331-201-TPC	Total/NA	Water	8015B GRO LL	
MB 570-746091/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-746091/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-746091/4	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-746091/5	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-215107-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-215107-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-215091-1
 SDG: Weekly: Aiea Gulch Wells Pump 1

GC Semi VOA

Prep Batch: 743620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	3510C	
MB 570-743620/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-743620/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-743620/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-743620/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-215489-I-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-215489-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 744450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Total/NA	Drinking Water	8015B	743620
MB 570-743620/1-A	Method Blank	Total/NA	Water	8015B	743620
LCS 570-743620/2-A	Lab Control Sample	Total/NA	Water	8015B	743620
LCSD 570-743620/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	743620
MRL 570-743620/4-A	Lab Control Sample	Total/NA	Water	8015B	743620
380-215489-I-1-A MS	Matrix Spike	Total/NA	Water	8015B	743620
380-215489-J-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	743620



Lab Chronicle

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

**Client Sample ID: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-1

**Date Collected: 05/18/26 11:17
Date Received: 05/20/26 09:27**

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			229858	IQ42	EA POM	05/27/26 14:14
Total/NA	Analysis	525.2		1	230071	UPAC	EA POM	05/28/26 14:50
Total/NA	Prep	625.1			741583	H1SH	EET CAL 4	05/21/26 05:09
Total/NA	Analysis	625.1		1	747560	PQS1	EET CAL 4	06/02/26 11:39
Total/NA	Prep	625.1			741583	H1SH	EET CAL 4	05/21/26 05:09
Total/NA	Analysis	625.1 SIM		1	743023	CG	EET CAL 4	05/22/26 18:34
Total/NA	Analysis	8015B GRO LL		1	746091	A9VE	EET CAL 4	05/30/26 00:08
Total/NA	Prep	3510C			743620	TVD6	EET CAL 4	05/24/26 09:44
Total/NA	Analysis	8015B		1	744450	H6FE	EET CAL 4	05/27/26 06:29

**Client Sample ID: TB: AIEA GULCH WELLS PUMP 1
(331-201-TP071)**

Lab Sample ID: 380-215091-2

**Date Collected: 05/18/26 11:17
Date Received: 05/20/26 09:27**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	746091	A9VE	EET CAL 4	05/29/26 22:59

Laboratory References:

EA POM = Eurofins 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: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

Laboratory: Eurofins 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 Hawaii State CA00006. 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	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
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

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	03-02-27
Arizona	State	AZ0830	11-17-26
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-26

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

Accreditation/Certification Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

Laboratory: Eurofins Calscience (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
Oregon	NELAP	4175	02-02-27
USDA	US Federal Programs	525-23-159-97150	09-30-26
Utah	NELAP	CA00111	02-28-27
Washington	State	C916	10-12-26

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

Method Summary

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

Job ID: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

Method	Method Description	Protocol	Laboratory
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
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	EET CAL 4
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
625.1	Liquid-Liquid Extraction	40CFR136A	EET CAL 4

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

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

Laboratory References:

EA POM = Eurofins 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: 380-215091-1
SDG: Weekly: Aiea Gulch Wells Pump 1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-215091-1	AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Drinking Water	05/18/26 11:17	05/20/26 09:27	HI0000331
380-215091-2	TB: AIEA GULCH WELLS PUMP 1 (331-201-TP071)	Water	05/18/26 11:17	05/20/26 09:27	

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

Chain of Custody Record

Client Information		Sampler: bailey	Lab PM: Lopez, Maria	Carrier Tracking No(s):	COC No:
Client Contact: Mr Kirk Iwamoto		Phone: +1 808 748 5840	E-Mail: Maria.Lopez@et.eurofins.com	State of Origin:	Page: Page 1 of 1
Company: City & County of Honolulu		PWSID:		Job #:	
Address: 630 South Beretania Street Chemistry Lab		Due Date Requested:		Analysis Requested	
City: Honolulu		TAT Requested (days):		Total Number of Containers	
State Zip: HI, 96843		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Preservation Codes: R - NaThioSO4 RA - NaThioHCl Q - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate	
Phone: 808-748-5840 (Tel)		PO #: C20525101 exp 05312023		Other: 380-215091 COC	
Email: kiwamoto@hbws.org		WO #:		QR Code	
Project Name: RED-HILL/HBWS Sites		Project #: 38001111		Special Instructions/Note:	
Event Desc: RUSH Weekly Red Hill		SSOW#:			
Site: Hawaii					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Preservation Code:	Matrix (Water, Solid, Other)
Aiea Gulch Wells Pump 1 (331-201-TP071)	18-May-2026	1117	G		Water
Aiea Gulch Wells Pump 1 (331-201-TP071) (Matrix Spike)					Water
Aiea Gulch Wells Pump 1 (331-201-TP071)(Matrix Spike Duplicate)					Water
TB: Aiea Gulch Wells Pump 1 (331-201-TP071)	18-May-2026	1117			Water
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
<input type="checkbox"/> 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:		Method of Shipment: FedEx 9720 03245847	
Relinquished by		Date/Time: 10/16/2026		Date/Time: 5/20/26 9:27	
Company: HBWS		Company: Markkvetia		Company: CLAL	
Date/Time: 10/16/2026		Date/Time: 14CC		Date/Time: 5/20/26 9:27	
Relinquished by		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: (31A) 2.2 + 0.0 - 2.2 gpl. F8326	



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Lopez, Maria	Carrier Tracking No(s): N/A	COC No: 380-336593.1																	
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 L			Accreditations Required (See note): State - Hawaii		Job #: 380-215091-1																	
Address: 2841 Dow Avenue, Suite 100, City: Tustin State, Zip: CA, 92780 Phone: 714-895-5494(Tel) Email: N/A Project Name: RED-HILL Site: Honolulu BWS Sites		Due Date Requested: 6/3/2025 TAT Requested (days): N/A	Analysis Requested																			
PO #: N/A WO #: N/A Project #: 38001111 SSOW#: N/A		<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>625.1_SIM/MSD_Prep(MOD) Extended PAH List</th> <th>8015B_DRO_LL_CS/MS/EC_LLHNL Ranges: C10-C24/C24-C36/C38-C18</th> <th>8015B_GFC_LL/5030C(MOD) GFC</th> <th>Total Number of Containers</th> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>7</td> </tr> <tr> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td>2</td> </tr> </table>			Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625.1_SIM/MSD_Prep(MOD) Extended PAH List	8015B_DRO_LL_CS/MS/EC_LLHNL Ranges: C10-C24/C24-C36/C38-C18	8015B_GFC_LL/5030C(MOD) GFC	Total Number of Containers	X	X	X	X		7	X	X		X		2
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625.1_SIM/MSD_Prep(MOD) Extended PAH List	8015B_DRO_LL_CS/MS/EC_LLHNL Ranges: C10-C24/C24-C36/C38-C18	8015B_GFC_LL/5030C(MOD) GFC	Total Number of Containers																	
X	X	X	X		7																	
X	X		X		2																	
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Special Instructions/Note:																
AIEA GULCH WELLS PUMP 1 (331-201-TP071) (380-215091-1)		5/18/26	11:17 Hawaiian	G	Water	MRLs are needed. Confirm any hits >RL.																
TB: AIEA GULCH WELLS PUMP 1 (331-201-TP071) (380-215091-1)		5/18/26	11:17 Hawaiian	G	Water	MRLs are needed. Confirm any hits >RL.																



380-215091 Chain of Custody

Note: Since laboratory accreditations are subject to change, Eurofins Drinking Water and Wastewater West, 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/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Drinking Water and Wastewater West, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Drinking Water and Wastewater West, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Drinking Water and Wastewater West, LLC.

Possible Hazard Identification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
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)		Primary Deliverable Rank: 2	Special Instructions/QC Requirements:		
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: <i>Mark Larratin</i>	Date/Time: <i>5/20/26 1600</i>	Company: <i>ELAP</i>	Received by: <i>Leos</i>	Date/Time: <i>5-20-26 16:00</i>	Company: <i>WAW</i>
Relinquished by: <i>Leos</i>	Date/Time: <i>5-20-26 17:45</i>	Company: <i>WAW</i>	Received by: <i>EL</i>	Date/Time: <i>5/20/26 17:45</i>	Company: <i>REC</i>
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: <i>1.2/15 IR-9</i>			



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-215091-1
SDG Number: Weekly: Aiea Gulch Wells Pump 1

Login Number: 215091
List Number: 1
Creator: Segura, Ryan

List Source: Eurofins Pomona

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-215091-1
SDG Number: Weekly: Aiea Gulch Wells Pump 1

Login Number: 215091

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 05/20/26 07:19 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
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	fgf5
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	