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# ANALYTICAL REPORT

## PREPARED FOR

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

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## JOB DESCRIPTION

RED-HILL  
Weekly: Halawa Shaft Viewing Pool

## JOB NUMBER

380-208741-1

# 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](mailto:Maria.Lopez@et.eurofinsus.com)  
(626)386-1100

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# Definitions/Glossary

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

## Qualifiers

### GC/MS Semi 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 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: 380-208741-1

**Job ID: 380-208741-1**

**Eurofins Pomona**

## Job Narrative 380-208741-1

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 4/16/2026 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.5°C.

### GC/MS Semi VOA

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

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

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

### Gasoline Range Organics

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

### Diesel Range Organics

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

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# Detection Summary

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

No Detections.

**Client Sample ID: TB: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-2**

No Detections.

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This Detection Summary does not include radiochemical test results.

# Client Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2,4'-DDD	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2,4'-DDE	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2,4'-DDT	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
2-Methylnaphthalene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
4,4'-DDD	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
4,4'-DDE	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
4,4'-DDT	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Acenaphthene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Acenaphthylene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Acetochlor	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Alachlor	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
alpha-BHC	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
alpha-Chlordane	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Anthracene	<0.019		0.019	ug/L		04/22/26 10:13	04/23/26 17:39	1
Atrazine	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Benz(a)anthracene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Benzo[a]pyrene	<0.019		0.019	ug/L		04/22/26 10:13	04/23/26 17:39	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		04/22/26 10:13	04/23/26 17:39	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		04/22/26 10:13	04/23/26 17:39	1
beta-BHC	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		04/22/26 10:13	04/23/26 17:39	1
Bromacil	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Butachlor	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Butylbenzylphthalate	<0.48		0.48	ug/L		04/22/26 10:13	04/23/26 17:39	1
Chlorobenzilate	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Chloroneb	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Chlorpyrifos	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Chrysene	<0.019		0.019	ug/L		04/22/26 10:13	04/23/26 17:39	1
delta-BHC	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		04/22/26 10:13	04/23/26 17:39	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Dieldrin	<0.0097	^3+	0.0097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Diethylphthalate	<0.48		0.48	ug/L		04/22/26 10:13	04/23/26 17:39	1
Dimethylphthalate	<0.48		0.48	ug/L		04/22/26 10:13	04/23/26 17:39	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		04/22/26 10:13	04/23/26 17:39	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Endosulfan sulfate	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Endrin	<0.0097		0.0097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Endrin aldehyde	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
EPTC	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Fluoranthene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1

# Client Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
gamma-Chlordane	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Heptachlor	<0.0097		0.0097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Hexachlorobenzene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Isophorone	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Lindane	<0.0097		0.0097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Malathion	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Methoxychlor	<0.048	^3+	0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Metolachlor	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Molinate	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Naphthalene	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Parathion	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Pendimethalin (Penoxaline)	<0.097	^3+	0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Phenanthrene	<0.039		0.039	ug/L		04/22/26 10:13	04/23/26 17:39	1
Propachlor	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Pyrene	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Simazine	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Terbacil	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Terbutylazine	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Thiobencarb	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		04/22/26 10:13	04/23/26 17:39	1
trans-Nonachlor	<0.048		0.048	ug/L		04/22/26 10:13	04/23/26 17:39	1
Trifluralin	<0.097		0.097	ug/L		04/22/26 10:13	04/23/26 17:39	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/22/26 10:13	04/23/26 17:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	97		70 - 130	04/22/26 10:13	04/23/26 17:39	1
Perylene-d12	93		70 - 130	04/22/26 10:13	04/23/26 17:39	1
Triphenylphosphate	104		70 - 130	04/22/26 10:13	04/23/26 17:39	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		04/17/26 16:18	04/21/26 15:21	1
2-Methylnaphthalene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Acenaphthene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Acenaphthylene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Anthracene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Benzo[a]anthracene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Benzo[a]pyrene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Chrysene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Fluoranthene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1

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# Client Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Naphthalene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Phenanthrene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1
Pyrene	<0.19		0.19	ug/L		04/17/26 16:18	04/21/26 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	92		28 - 127	04/17/26 16:18	04/21/26 15:21	1
2-Fluorobiphenyl (Surr)	84		31 - 120	04/17/26 16:18	04/21/26 15:21	1
2-Fluorophenol (Surr)	48		17 - 120	04/17/26 16:18	04/21/26 15:21	1
Nitrobenzene-d5 (Surr)	84		27 - 120	04/17/26 16:18	04/21/26 15:21	1
Phenol-d6 (Surr)	28		10 - 120	04/17/26 16:18	04/21/26 15:21	1
p-Terphenyl-d14 (Surr)	79		45 - 120	04/17/26 16:18	04/21/26 15:21	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	04/17/26 16:18	04/23/26 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	102		33 - 139	04/17/26 16:18	04/23/26 13:45	1
2-Fluorobiphenyl (Surr)	87		33 - 126	04/17/26 16:18	04/23/26 13:45	1
2-Fluorophenol (Surr)	52		12 - 120	04/17/26 16:18	04/23/26 13:45	1
Nitrobenzene-d5 (Surr)	93		36 - 120	04/17/26 16:18	04/23/26 13:45	1
Phenol-d6 (Surr)	33		10 - 120	04/17/26 16:18	04/23/26 13:45	1
p-Terphenyl-d14 (Surr)	88		47 - 131	04/17/26 16:18	04/23/26 13:45	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			04/22/26 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		38 - 134		04/22/26 19:29	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		04/20/26 13:20	04/21/26 04:00	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		04/20/26 13:20	04/21/26 04:00	1
C8-C18	<26		26	ug/L		04/20/26 13:20	04/21/26 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	113		60 - 130	04/20/26 13:20	04/21/26 04:00	1

**Client Sample ID: TB: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-2**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

**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			04/22/26 19:52	1

# Client Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: TB: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-2**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

<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)	99		38 - 134		04/22/26 19:52	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: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

## 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	RL	Method	Prep Type
				Limit			
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0097		ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Methoxychlor	<0.048	^3+	ug/L	40	0.048	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	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: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

## 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)
380-208741-1	HALAWA SHAFT Viewing Pool	97	93	104
380-209008-R-1-A MS	Matrix Spike	99	96	105
380-209010-T-1-A DU	Duplicate	97	94	105
LCS 380-222001/23-A	Lab Control Sample	97	97	107
LCSD 380-222001/24-A	Lab Control Sample Dup	97	96	106
MB 380-222001/21-A	Method Blank	96	89	107
MRL 380-222001/22-A	Lab Control Sample	96	90	103

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-208741-1	HALAWA SHAFT Viewing Pool	102	87	52	93	33	88
MB 570-725816/1-A	Method Blank	103	87	61	100	39	90

**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)
380-208741-1	HALAWA SHAFT Viewing Pool	92	84	48	84	28	79
LCS 570-725816/2-A	Lab Control Sample	90	92	67	78	41	93
LCSD 570-725816/3-A	Lab Control Sample Dup	90	92	68	75	42	95
MB 570-725816/1-A	Method Blank	93	88	57	90	34	83

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

# Surrogate Summary

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

Job ID: 380-208741-1  
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (38-134)	
380-208348-B-1 MS	Matrix Spike	100	
380-208348-B-1 MSD	Matrix Spike Duplicate	101	
380-208741-1	HALAWA SHAFT Viewing Pool	100	
380-208741-2	TB: HALAWA SHAFT Viewing Pool	99	
LCS 570-728183/3	Lab Control Sample	99	
LCSD 570 728183/4	Lab Control Sample Dup	106	
MB 570-728183/6	Method Blank	103	
MRL 570-728183/5	Lab Control Sample	98	
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (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)	
380-208741-1	HALAWA SHAFT Viewing Pool	113	
LCS 570-727059/7-A	Lab Control Sample	118	
LCSD 570-727059/8-A	Lab Control Sample Dup	120	
MB 570-727059/1-A	Method Blank	102	
MRL 570-727059/4-A	Lab Control Sample	124	
<b>Surrogate Legend</b>			
OTCSN = n-Octacosane (Surr)			

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: MB 380-222001/21-A**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2,4'-DDD	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2,4'-DDE	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2,4'-DDT	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
2-Methylnaphthalene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
4,4'-DDD	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
4,4'-DDE	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
4,4'-DDT	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Acenaphthene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Acenaphthylene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Acetochlor	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Alachlor	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
alpha-BHC	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
alpha-Chlordane	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Anthracene	<0.020		0.020	ug/L		04/22/26 10:13	04/23/26 13:58	1
Atrazine	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Benz(a)anthracene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Benzo[a]pyrene	<0.020		0.020	ug/L		04/22/26 10:13	04/23/26 13:58	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		04/22/26 10:13	04/23/26 13:58	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		04/22/26 10:13	04/23/26 13:58	1
beta-BHC	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		04/22/26 10:13	04/23/26 13:58	1
Bromacil	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Butachlor	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Butylbenzylphthalate	<0.50		0.50	ug/L		04/22/26 10:13	04/23/26 13:58	1
Chlorobenzilate	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Chloroneb	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Chlorpyrifos	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Chrysene	<0.020		0.020	ug/L		04/22/26 10:13	04/23/26 13:58	1
delta-BHC	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		04/22/26 10:13	04/23/26 13:58	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Dieldrin	<0.0099	^3+	0.0099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Diethylphthalate	<0.50		0.50	ug/L		04/22/26 10:13	04/23/26 13:58	1
Dimethylphthalate	<0.50		0.50	ug/L		04/22/26 10:13	04/23/26 13:58	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		04/22/26 10:13	04/23/26 13:58	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Endosulfan sulfate	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Endrin	<0.0099		0.0099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Endrin aldehyde	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
EPTC	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: MB 380-222001/21-A**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Fluorene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
gamma-Chlordane	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Heptachlor	<0.0099		0.0099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Hexachlorobenzene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Isophorone	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Lindane	<0.0099		0.0099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Malathion	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Methoxychlor	<0.050	^3+	0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Metolachlor	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Molinate	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Naphthalene	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Parathion	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Pendimethalin (Penoxaline)	<0.099	^3+	0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Phenanthrene	<0.040		0.040	ug/L		04/22/26 10:13	04/23/26 13:58	1
Propachlor	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Pyrene	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Simazine	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Terbacil	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Terbutylazine	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Thiobencarb	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		04/22/26 10:13	04/23/26 13:58	1
trans-Nonachlor	<0.050		0.050	ug/L		04/22/26 10:13	04/23/26 13:58	1
Trifluralin	<0.099		0.099	ug/L		04/22/26 10:13	04/23/26 13:58	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Cyclopentene, 1,2,3,4,5-pentamethyl-	0.605	T J N	ug/L		2.57	1000154-28-6	04/22/26 10:13	04/23/26 13:58	1
Decane, 4-methyl-	0.774	T J N	ug/L		3.03	2847-72-5	04/22/26 10:13	04/23/26 13:58	1
Undecane	5.99	T J N	ug/L		3.16	1120-21-4	04/22/26 10:13	04/23/26 13:58	1
9-Octadecenamamide, (Z)-	1.79	T J N	ug/L		7.99	301-02-0	04/22/26 10:13	04/23/26 13:58	1
13-Docosenamamide, (Z)-	0.926	T J N	ug/L		10.56	112-84-5	04/22/26 10:13	04/23/26 13:58	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	96		70 - 130	04/22/26 10:13	04/23/26 13:58	1
Perylene-d12	89		70 - 130	04/22/26 10:13	04/23/26 13:58	1
Triphenylphosphate	107		70 - 130	04/22/26 10:13	04/23/26 13:58	1

**Lab Sample ID: LCS 380-222001/23-A**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	1.99	2.10	ug/L		106	70 - 130	

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: LCS 380-222001/23-A**

**Matrix: Water**

**Analysis Batch: 222409**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 222001**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
2,4'-DDE	1.99	2.05		ug/L		103	70 - 130
2,4'-DDT	1.99	2.20		ug/L		111	70 - 130
2,4-Dinitrotoluene	1.99	2.13		ug/L		107	70 - 130
2,6-Dinitrotoluene	1.99	2.10		ug/L		106	70 - 130
2-Methylnaphthalene	1.99	1.97		ug/L		99	70 - 130
4,4'-DDD	1.99	2.26		ug/L		114	70 - 130
4,4'-DDE	1.99	2.07		ug/L		104	70 - 130
4,4'-DDT	1.99	2.34		ug/L		118	70 - 130
Acenaphthene	1.99	2.05		ug/L		103	70 - 130
Acenaphthylene	1.99	1.92		ug/L		97	70 - 130
Acetochlor	1.99	2.11		ug/L		106	70 - 130
Alachlor	1.99	2.18		ug/L		109	70 - 130
alpha-BHC	1.99	2.14		ug/L		108	70 - 130
alpha-Chlordane	1.99	2.10		ug/L		106	70 - 130
Anthracene	1.99	1.87		ug/L		94	70 - 130
Atrazine	1.99	2.24		ug/L		113	70 - 130
Benz(a)anthracene	1.99	2.16		ug/L		109	70 - 130
Benzo[a]pyrene	1.99	2.02		ug/L		102	70 - 130
Benzo[b]fluoranthene	1.99	2.11		ug/L		106	70 - 130
Benzo[g,h,i]perylene	1.99	1.98		ug/L		100	70 - 130
Benzo[k]fluoranthene	1.99	1.98		ug/L		99	70 - 130
beta-BHC	1.99	2.21		ug/L		111	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	2.19		ug/L		110	70 - 130
Bromacil	1.99	1.94		ug/L		98	70 - 130
Butachlor	1.99	2.28		ug/L		115	70 - 130
Butylbenzylphthalate	1.99	2.24		ug/L		113	70 - 130
Chlorobenzilate	1.99	2.21		ug/L		111	70 - 130
Chloroneb	1.99	2.16		ug/L		108	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.12		ug/L		107	70 - 130
Chlorpyrifos	1.99	2.11		ug/L		106	70 - 130
Chrysene	1.99	2.06		ug/L		103	70 - 130
delta-BHC	1.99	2.04		ug/L		103	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.32		ug/L		116	70 - 130
Dibenz(a,h)anthracene	1.99	2.01		ug/L		101	70 - 130
Diclorvos (DDVP)	1.99	2.14		ug/L		107	70 - 130
Dieldrin	1.99	2.13		ug/L		107	70 - 130
Diethylphthalate	1.99	2.19		ug/L		110	70 - 130
Dimethylphthalate	1.99	2.15		ug/L		108	70 - 130
Di-n-butyl phthalate	3.98	4.41		ug/L		111	70 - 130
Di-n-octyl phthalate	1.99	2.15		ug/L		108	70 - 130
Endosulfan I (Alpha)	1.99	2.11		ug/L		106	70 - 130
Endosulfan II (Beta)	1.99	2.09		ug/L		105	70 - 130
Endosulfan sulfate	1.99	2.24		ug/L		113	70 - 130
Endrin	1.99	2.36		ug/L		118	70 - 130
Endrin aldehyde	1.99	2.12		ug/L		106	60 - 130
EPTC	1.99	2.06		ug/L		104	70 - 130
Fluoranthene	1.99	2.09		ug/L		105	70 - 130
Fluorene	1.99	2.07		ug/L		104	70 - 130
gamma-Chlordane	1.99	2.19		ug/L		110	70 - 130

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: LCS 380-222001/23-A**

**Matrix: Water**

**Analysis Batch: 222409**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 222001**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Heptachlor	1.99	2.17		ug/L		109	70 - 130	
Heptachlor epoxide (isomer B)	1.99	2.14		ug/L		108	70 - 130	
Hexachlorobenzene	1.99	1.94		ug/L		98	70 - 130	
Hexachlorocyclopentadiene	1.99	2.05		ug/L		103	70 - 130	
Indeno[1,2,3-cd]pyrene	1.99	2.07		ug/L		104	70 - 130	
Isophorone	1.99	2.04		ug/L		103	70 - 130	
Lindane	1.99	2.20		ug/L		111	70 - 130	
Malathion	1.99	2.17		ug/L		109	70 - 130	
Methoxychlor	1.99	2.14		ug/L		108	70 - 130	
Metolachlor	1.99	2.13		ug/L		107	70 - 130	
Molinate	1.99	2.11		ug/L		106	70 - 130	
Naphthalene	1.99	1.92		ug/L		97	70 - 130	
Parathion	1.99	2.36		ug/L		119	70 - 130	
Pendimethalin (Penoxaline)	1.99	2.09		ug/L		105	70 - 130	
Phenanthrene	1.99	2.03		ug/L		102	70 - 130	
Propachlor	1.99	2.20		ug/L		110	70 - 130	
Pyrene	1.99	2.09		ug/L		105	70 - 130	
Simazine	1.99	2.20		ug/L		111	70 - 130	
Terbacil	1.99	2.14		ug/L		108	70 - 130	
Terbutylazine	1.99	2.18		ug/L		110	70 - 130	
Thiobencarb	1.99	2.14		ug/L		108	70 - 130	
trans-Nonachlor	1.99	1.97		ug/L		99	70 - 130	
Trifluralin	1.99	2.00		ug/L		100	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	107		70 - 130

**Lab Sample ID: LCSD 380-222001/24-A**

**Matrix: Water**

**Analysis Batch: 222409**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 222001**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits		RPD	Limit
1-Methylnaphthalene	1.99	2.01		ug/L		101	70 - 130	1	20	
2,4'-DDD	1.99	2.10		ug/L		106	70 - 130	0	20	
2,4'-DDE	1.99	2.05		ug/L		103	70 - 130	0	20	
2,4'-DDT	1.99	2.16		ug/L		109	70 - 130	2	20	
2,4-Dinitrotoluene	1.99	2.26		ug/L		113	70 - 130	6	20	
2,6-Dinitrotoluene	1.99	2.26		ug/L		114	70 - 130	7	20	
2-Methylnaphthalene	1.99	1.99		ug/L		100	70 - 130	1	20	
4,4'-DDD	1.99	2.22		ug/L		112	70 - 130	2	20	
4,4'-DDE	1.99	2.06		ug/L		104	70 - 130	1	20	
4,4'-DDT	1.99	2.35		ug/L		118	70 - 130	0	20	
Acenaphthene	1.99	2.05		ug/L		103	70 - 130	0	20	
Acenaphthylene	1.99	1.92		ug/L		97	70 - 130	0	20	
Acetochlor	1.99	2.14		ug/L		108	70 - 130	1	20	
Alachlor	1.99	2.15		ug/L		108	70 - 130	1	20	

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# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-222001/24-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 222409

Prep Batch: 222001

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
alpha-BHC	1.99	2.15		ug/L		108	70 - 130	1	20
alpha-Chlordane	1.99	2.11		ug/L		106	70 - 130	0	20
Anthracene	1.99	1.88		ug/L		94	70 - 130	0	20
Atrazine	1.99	2.24		ug/L		113	70 - 130	0	20
Benz(a)anthracene	1.99	2.19		ug/L		110	70 - 130	1	20
Benzo[a]pyrene	1.99	2.06		ug/L		104	70 - 130	2	20
Benzo[b]fluoranthene	1.99	2.13		ug/L		107	70 - 130	1	20
Benzo[g,h,i]perylene	1.99	1.99		ug/L		100	70 - 130	1	20
Benzo[k]fluoranthene	1.99	2.03		ug/L		102	70 - 130	3	20
beta-BHC	1.99	2.23		ug/L		112	70 - 130	1	20
Bis(2-ethylhexyl) phthalate	1.99	2.20		ug/L		111	70 - 130	1	20
Bromacil	1.99	2.07		ug/L		104	70 - 130	6	20
Butachlor	1.99	2.27		ug/L		114	70 - 130	0	20
Butylbenzylphthalate	1.99	2.19		ug/L		110	70 - 130	2	20
Chlorobenzilate	1.99	2.19		ug/L		110	70 - 130	1	20
Chloroneb	1.99	2.11		ug/L		106	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	1.99	2.10		ug/L		106	70 - 130	1	20
Chlorpyrifos	1.99	2.11		ug/L		106	70 - 130	0	20
Chrysene	1.99	2.03		ug/L		102	70 - 130	1	20
delta-BHC	1.99	2.02		ug/L		102	70 - 130	1	20
Di(2-ethylhexyl)adipate	1.99	2.29		ug/L		115	70 - 130	1	20
Dibenz(a,h)anthracene	1.99	1.98		ug/L		100	70 - 130	1	20
Diclorvos (DDVP)	1.99	2.21		ug/L		111	70 - 130	3	20
Dieldrin	1.99	2.10		ug/L		106	70 - 130	1	20
Diethylphthalate	1.99	2.20		ug/L		111	70 - 130	0	20
Dimethylphthalate	1.99	2.21		ug/L		111	70 - 130	3	20
Di-n-butyl phthalate	3.97	4.35		ug/L		110	70 - 130	1	20
Di-n-octyl phthalate	1.99	2.15		ug/L		108	70 - 130	0	20
Endosulfan I (Alpha)	1.99	2.11		ug/L		106	70 - 130	0	20
Endosulfan II (Beta)	1.99	2.08		ug/L		104	70 - 130	1	20
Endosulfan sulfate	1.99	2.21		ug/L		111	70 - 130	1	20
Endrin	1.99	2.38		ug/L		120	70 - 130	1	20
Endrin aldehyde	1.99	2.14		ug/L		108	60 - 130	1	20
EPTC	1.99	2.10		ug/L		106	70 - 130	2	20
Fluoranthene	1.99	2.09		ug/L		105	70 - 130	0	20
Fluorene	1.99	2.08		ug/L		105	70 - 130	0	20
gamma-Chlordane	1.99	2.19		ug/L		110	70 - 130	0	20
Heptachlor	1.99	2.20		ug/L		111	70 - 130	1	20
Heptachlor epoxide (isomer B)	1.99	2.16		ug/L		109	70 - 130	1	20
Hexachlorobenzene	1.99	1.98		ug/L		100	70 - 130	2	20
Hexachlorocyclopentadiene	1.99	2.15		ug/L		108	70 - 130	5	20
Indeno[1,2,3-cd]pyrene	1.99	2.05		ug/L		103	70 - 130	1	20
Isophorone	1.99	2.08		ug/L		105	70 - 130	2	20
Lindane	1.99	2.23		ug/L		112	70 - 130	1	20
Malathion	1.99	2.16		ug/L		109	70 - 130	0	20
Methoxychlor	1.99	2.18		ug/L		110	70 - 130	2	20
Metolachlor	1.99	2.09		ug/L		105	70 - 130	2	20
Molinate	1.99	2.12		ug/L		107	70 - 130	1	20
Naphthalene	1.99	1.93		ug/L		97	70 - 130	0	20

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# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-222001/24-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 222409

Prep Batch: 222001

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Parathion	1.99	2.33		ug/L		118	70 - 130	1	20	
Pendimethalin (Penoxaline)	1.99	2.12		ug/L		107	70 - 130	1	20	
Phenanthrene	1.99	2.04		ug/L		102	70 - 130	0	20	
Propachlor	1.99	2.23		ug/L		112	70 - 130	2	20	
Pyrene	1.99	2.10		ug/L		106	70 - 130	0	20	
Simazine	1.99	2.28		ug/L		115	70 - 130	4	20	
Terbacil	1.99	2.29		ug/L		115	70 - 130	6	20	
Terbutylazine	1.99	2.19		ug/L		110	70 - 130	0	20	
Thiobencarb	1.99	2.14		ug/L		108	70 - 130	0	20	
trans-Nonachlor	1.99	1.97		ug/L		99	70 - 130	0	20	
Trifluralin	1.99	2.06		ug/L		104	70 - 130	3	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	106		70 - 130

Lab Sample ID: MRL 380-222001/22-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 222409

Prep Batch: 222001

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec	
							Limits	RPD
1-Methylnaphthalene	0.0992	0.110		ug/L		111	50 - 150	
2,4'-DDD	0.0992	0.101		ug/L		102	50 - 150	
2,4'-DDE	0.0992	0.110		ug/L		111	50 - 150	
2,4'-DDT	0.0992	0.136		ug/L		137	50 - 150	
2,4-Dinitrotoluene	0.0992	0.133		ug/L		134	50 - 150	
2,6-Dinitrotoluene	0.0992	0.137		ug/L		138	50 - 150	
2-Methylnaphthalene	0.0992	0.105		ug/L		106	50 - 150	
4,4'-DDD	0.0992	0.121		ug/L		122	50 - 150	
4,4'-DDE	0.0992	0.110		ug/L		111	50 - 150	
4,4'-DDT	0.0992	0.127		ug/L		128	50 - 150	
Acenaphthene	0.0992	0.100		ug/L		101	50 - 150	
Acenaphthylene	0.0992	0.0973	J	ug/L		98	50 - 150	
Acetochlor	0.0992	0.133		ug/L		134	50 - 150	
Alachlor	0.0496	0.0735		ug/L		148	50 - 150	
alpha-BHC	0.0992	0.104		ug/L		105	50 - 150	
alpha-Chlordane	0.0248	0.0303	J	ug/L		122	50 - 150	
Anthracene	0.0198	0.0258		ug/L		130	50 - 150	
Atrazine	0.0496	0.0716		ug/L		144	50 - 150	
Benz(a)anthracene	0.0496	0.0634		ug/L		128	50 - 150	
Benzo[a]pyrene	0.0198	0.0272		ug/L		137	50 - 150	
Benzo[b]fluoranthene	0.0198	0.0261		ug/L		131	50 - 150	
Benzo[g,h,i]perylene	0.0496	0.0598		ug/L		121	50 - 150	
Benzo[k]fluoranthene	0.0198	0.0266		ug/L		134	50 - 150	
beta-BHC	0.0992	0.124		ug/L		125	50 - 150	
Bis(2-ethylhexyl) phthalate	0.595	0.631		ug/L		106	50 - 150	
Bromacil	0.0992	0.125		ug/L		126	50 - 150	

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# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-222001/22-A

Matrix: Water

Analysis Batch: 222409

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 222001

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Butachlor	0.0496	0.0722		ug/L		146	50 - 150
Butylbenzylphthalate	0.496	0.607		ug/L		122	50 - 150
Chlorobenzilate	0.0992	0.123		ug/L		124	50 - 150
Chloroneb	0.0992	0.119		ug/L		120	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0992	0.111		ug/L		112	50 - 150
Chlorpyrifos	0.0496	0.0718		ug/L		145	50 - 150
Chrysene	0.0198	0.0257		ug/L		130	50 - 150
delta-BHC	0.0992	0.118		ug/L		119	50 - 150
Di(2-ethylhexyl)adipate	0.595	0.698		ug/L		117	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0642		ug/L		129	50 - 150
Diclorvos (DDVP)	0.0496	0.0647		ug/L		131	50 - 150
Dieldrin	0.00992	0.0152	^3+	ug/L		153	50 - 150
Diethylphthalate	0.496	0.573		ug/L		116	50 - 150
Dimethylphthalate	0.496	0.556		ug/L		112	50 - 150
Di-n-butyl phthalate	0.496	0.636	J	ug/L		128	49 - 243
Di-n-octyl phthalate	0.0992	0.108		ug/L		109	50 - 150
Endosulfan I (Alpha)	0.0992	0.0958	J	ug/L		97	50 - 150
Endosulfan II (Beta)	0.0992	0.115		ug/L		116	50 - 150
Endosulfan sulfate	0.0992	0.109		ug/L		110	50 - 150
Endrin	0.00992	0.0129		ug/L		130	50 - 150
Endrin aldehyde	0.0992	0.124		ug/L		125	50 - 150
EPTC	0.0992	0.110		ug/L		111	50 - 150
Fluoranthene	0.0992	0.109		ug/L		110	50 - 150
Fluorene	0.0496	0.0613		ug/L		124	50 - 150
gamma-Chlordane	0.0248	0.0311	J	ug/L		125	50 - 150
Heptachlor	0.00992	0.0139		ug/L		140	50 - 150
Heptachlor epoxide (isomer B)	0.00992	0.0134		ug/L		135	50 - 150
Hexachlorobenzene	0.0496	0.0554		ug/L		112	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0576		ug/L		116	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0654		ug/L		132	50 - 150
Isophorone	0.0992	0.125		ug/L		126	50 - 150
Lindane	0.00992	0.0123		ug/L		124	50 - 150
Malathion	0.0992	0.137		ug/L		138	50 - 150
Methoxychlor	0.0496	0.0786	^3+	ug/L		159	50 - 150
Metolachlor	0.0496	0.0724		ug/L		146	50 - 150
Molinate	0.0992	0.122		ug/L		123	50 - 150
Naphthalene	0.0992	0.104		ug/L		105	50 - 150
Parathion	0.0992	0.112		ug/L		112	50 - 150
Pendimethalin (Penoxaline)	0.0992	0.151	^3+	ug/L		153	50 - 150
Phenanthrene	0.0397	0.0456		ug/L		115	50 - 150
Propachlor	0.0496	0.0700		ug/L		141	50 - 150
Pyrene	0.0496	0.0571		ug/L		115	50 - 150
Simazine	0.0496	0.0670		ug/L		135	50 - 150
Terbacil	0.0992	0.122		ug/L		123	50 - 150
Terbutylazine	0.0992	0.122		ug/L		123	50 - 150
Thiobencarb	0.0992	0.131		ug/L		132	50 - 150
trans-Nonachlor	0.0248	0.0272	J	ug/L		110	50 - 150
Trifluralin	0.0992	0.115		ug/L		116	50 - 150

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: MRL 380-222001/22-A**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	103		70 - 130

**Lab Sample ID: 380-209008-R-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		2.01	2.02		ug/L		100	70 - 130
2,4'-DDD	<0.098		2.01	2.10		ug/L		105	70 - 130
2,4'-DDE	<0.098		2.01	2.01		ug/L		100	70 - 130
2,4'-DDT	<0.098		2.01	2.11		ug/L		105	70 - 130
2,4-Dinitrotoluene	<0.098		2.01	2.23		ug/L		111	70 - 130
2,6-Dinitrotoluene	<0.098		2.01	2.21		ug/L		110	70 - 130
2-Methylnaphthalene	<0.098		2.01	1.99		ug/L		99	70 - 130
4,4'-DDD	<0.098		2.01	2.23		ug/L		111	70 - 130
4,4'-DDE	<0.098		2.01	1.99		ug/L		99	70 - 130
4,4'-DDT	<0.098		2.01	2.27		ug/L		113	70 - 130
Acenaphthene	<0.098		2.01	2.06		ug/L		103	70 - 130
Acenaphthylene	<0.098		2.01	1.85		ug/L		92	70 - 130
Acetochlor	<0.098		2.01	2.09		ug/L		104	70 - 130
Alachlor	<0.049		2.01	2.11		ug/L		105	70 - 130
alpha-BHC	<0.098		2.01	2.14		ug/L		106	70 - 130
alpha-Chlordane	<0.049		2.01	2.12		ug/L		106	70 - 130
Anthracene	<0.020		2.01	1.52		ug/L		76	70 - 130
Atrazine	<0.049		2.01	2.06		ug/L		102	70 - 130
Benz(a)anthracene	<0.049		2.01	2.15		ug/L		107	70 - 130
Benzo[a]pyrene	<0.020		2.01	2.03		ug/L		101	70 - 130
Benzo[b]fluoranthene	<0.020		2.01	2.16		ug/L		107	70 - 130
Benzo[g,h,i]perylene	<0.049		2.01	1.97		ug/L		98	70 - 130
Benzo[k]fluoranthene	<0.020		2.01	2.05		ug/L		102	70 - 130
beta-BHC	<0.098		2.01	2.17		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		2.01	2.07		ug/L		103	70 - 130
Bromacil	<0.098		2.01	2.11		ug/L		105	70 - 130
Butachlor	<0.049		2.01	2.20		ug/L		110	70 - 130
Butylbenzylphthalate	<0.49		2.01	2.20		ug/L		109	70 - 130
Chlorobenzilate	<0.098		2.01	2.24		ug/L		111	70 - 130
Chloroneb	<0.098		2.01	2.07		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		2.01	2.08		ug/L		104	70 - 130
Chlorpyrifos	<0.049		2.01	2.08		ug/L		104	70 - 130
Chrysene	<0.020		2.01	2.08		ug/L		103	70 - 130
delta-BHC	<0.098		2.01	2.02		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	<0.59		2.01	2.13		ug/L		106	70 - 130
Dibenz(a,h)anthracene	<0.049		2.01	2.00		ug/L		100	70 - 130
Diclorvos (DDVP)	<0.049		2.01	2.17		ug/L		108	70 - 130
Dieldrin	<0.0098	^3+	2.01	2.16		ug/L		108	70 - 130
Diethylphthalate	<0.49		2.01	2.18		ug/L		109	70 - 130

## QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: 380-209008-R-1-A MS**

**Matrix: Water**

**Analysis Batch: 222409**

**Client Sample ID: Matrix Spike**

**Prep Type: Total/NA**

**Prep Batch: 222001**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Dimethylphthalate	<0.49		2.01	2.18		ug/L		108	70 - 130
Di-n-butyl phthalate	<0.98		4.02	4.34		ug/L		103	70 - 130
Di-n-octyl phthalate	<0.098		2.01	2.00		ug/L		99	70 - 130
Endosulfan I (Alpha)	<0.098		2.01	2.08		ug/L		104	70 - 130
Endosulfan II (Beta)	<0.098		2.01	2.15		ug/L		107	70 - 130
Endosulfan sulfate	<0.098		2.01	2.22		ug/L		110	70 - 130
Endrin	<0.0098		2.01	2.21		ug/L		110	70 - 130
Endrin aldehyde	<0.098		2.01	2.02		ug/L		101	60 - 130
EPTC	<0.098		2.01	2.10		ug/L		104	70 - 130
Fluoranthene	<0.098		2.01	2.09		ug/L		104	70 - 130
Fluorene	<0.049		2.01	2.08		ug/L		103	70 - 130
gamma-Chlordane	<0.049		2.01	2.19		ug/L		109	70 - 130
Heptachlor	<0.0098		2.01	2.18		ug/L		109	70 - 130
Heptachlor epoxide (isomer B)	<0.0098		2.01	2.11		ug/L		105	70 - 130
Hexachlorobenzene	<0.049		2.01	1.99		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.049		2.01	2.07		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		2.01	2.08		ug/L		104	70 - 130
Isophorone	<0.098		2.01	2.07		ug/L		103	70 - 130
Lindane	<0.0098		2.01	2.22		ug/L		110	70 - 130
Malathion	<0.098		2.01	2.16		ug/L		107	70 - 130
Methoxychlor	<0.049	^3+	2.01	2.20		ug/L		109	70 - 130
Metolachlor	<0.049		2.01	2.13		ug/L		106	70 - 130
Molinate	<0.098		2.01	2.13		ug/L		106	70 - 130
Naphthalene	<0.098		2.01	1.96		ug/L		98	70 - 130
Parathion	<0.098		2.01	2.35		ug/L		117	70 - 130
Pendimethalin (Penoxaline)	<0.098	^3+	2.01	2.16		ug/L		107	70 - 130
Phenanthrene	<0.039		2.01	2.03		ug/L		101	70 - 130
Propachlor	<0.049		2.01	2.23		ug/L		111	70 - 130
Pyrene	<0.049		2.01	2.08		ug/L		103	70 - 130
Simazine	<0.049		2.01	2.09		ug/L		104	70 - 130
Terbacil	<0.098		2.01	2.00		ug/L		100	70 - 130
Terbutylazine	<0.098		2.01	2.03		ug/L		101	70 - 130
Thiobencarb	<0.098		2.01	2.11		ug/L		105	70 - 130
trans-Nonachlor	<0.049		2.01	1.96		ug/L		97	70 - 130
Trifluralin	<0.098		2.01	2.09		ug/L		104	70 - 130

  

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	105		70 - 130

**Lab Sample ID: 380-209010-T-1-A DU**

**Matrix: Water**

**Analysis Batch: 222409**

**Client Sample ID: Duplicate**

**Prep Type: Total/NA**

**Prep Batch: 222001**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.097		<0.096		ug/L		NC	20
2,4'-DDD	<0.097		<0.096		ug/L		NC	20

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# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-209010-T-1-A DU

Client Sample ID: Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 222409

Prep Batch: 222001

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
2,4'-DDE	<0.097		<0.096		ug/L		NC	20
2,4'-DDT	<0.097		<0.096		ug/L		NC	20
2,4-Dinitrotoluene	<0.097		<0.096		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.096		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.096		ug/L		NC	20
4,4'-DDD	<0.097		<0.096		ug/L		NC	20
4,4'-DDE	<0.097		<0.096		ug/L		NC	20
4,4'-DDT	<0.097		<0.096		ug/L		NC	20
Acenaphthene	<0.097		<0.096		ug/L		NC	20
Acenaphthylene	<0.097		<0.096		ug/L		NC	20
Acetochlor	<0.097		<0.096		ug/L		NC	20
Alachlor	<0.048		<0.048		ug/L		NC	20
alpha-BHC	<0.097		<0.096		ug/L		NC	20
alpha-Chlordane	<0.048		<0.048		ug/L		NC	20
Anthracene	<0.019		<0.019		ug/L		NC	20
Atrazine	<0.048		<0.048		ug/L		NC	20
Benz(a)anthracene	<0.048		<0.048		ug/L		NC	20
Benzo[a]pyrene	<0.019		<0.019		ug/L		NC	20
Benzo[b]fluoranthene	<0.019		<0.019		ug/L		NC	20
Benzo[g,h,i]perylene	<0.048		<0.048		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.097		<0.096		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.58		ug/L		NC	20
Bromacil	<0.097		<0.096		ug/L		NC	20
Butachlor	<0.048		<0.048		ug/L		NC	20
Butylbenzylphthalate	<0.48		<0.48		ug/L		NC	20
Chlorobenzilate	<0.097		<0.096		ug/L		NC	20
Chloroneb	<0.097		<0.096		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.096		ug/L		NC	20
Chlorpyrifos	<0.048		<0.048		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.097		<0.096		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.048		<0.048		ug/L		NC	20
Diclorvos (DDVP)	<0.048		<0.048		ug/L		NC	20
Dieldrin	<0.0097	^3+	<0.0096		ug/L		NC	20
Diethylphthalate	<0.48		<0.48		ug/L		NC	20
Dimethylphthalate	<0.48		<0.48		ug/L		NC	20
Di-n-butyl phthalate	<0.97		<0.96		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.096		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.096		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.096		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.096		ug/L		NC	20
Endrin	<0.0097		<0.0096		ug/L		NC	20
Endrin aldehyde	<0.097		<0.096		ug/L		NC	20
EPTC	<0.097		<0.096		ug/L		NC	20
Fluoranthene	<0.097		<0.096		ug/L		NC	20
Fluorene	<0.048		<0.048		ug/L		NC	20
gamma-Chlordane	<0.048		<0.048		ug/L		NC	20

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: 380-209010-T-1-A DU**  
**Matrix: Water**  
**Analysis Batch: 222409**

**Client Sample ID: Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 222001**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Heptachlor	<0.0097		<0.0096		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0096		ug/L		NC	20
Hexachlorobenzene	<0.048		<0.048		ug/L		NC	20
Hexachlorocyclopentadiene	<0.048		<0.048		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.048		<0.048		ug/L		NC	20
Isophorone	<0.097		<0.096		ug/L		NC	20
Lindane	<0.0097		<0.0096		ug/L		NC	20
Malathion	<0.097		<0.096		ug/L		NC	20
Methoxychlor	<0.048	^3+	<0.048		ug/L		NC	20
Metolachlor	<0.048		<0.048		ug/L		NC	20
Molinate	<0.097		<0.096		ug/L		NC	20
Naphthalene	<0.097		<0.096		ug/L		NC	20
Parathion	<0.097		<0.096		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097	^3+	<0.096		ug/L		NC	20
Phenanthrene	<0.039		<0.038		ug/L		NC	20
Propachlor	<0.048		<0.048		ug/L		NC	20
Pyrene	<0.048		<0.048		ug/L		NC	20
Simazine	<0.048		<0.048		ug/L		NC	20
Terbacil	<0.097		<0.096		ug/L		NC	20
Terbutylazine	<0.097		<0.096		ug/L		NC	20
Thiobencarb	<0.097		<0.096		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.048		<0.048		ug/L		NC	20
Trifluralin	<0.097		<0.096		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	105		70 - 130

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

**Lab Sample ID: MB 570-725816/1-A**  
**Matrix: Water**  
**Analysis Batch: 728832**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 725816**

Tentatively Identified Compound	Est. Result	MB MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	04/17/26 05:59	04/23/26 13:21	1

Surrogate	MB MB %Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	103		33 - 139	04/17/26 05:59	04/23/26 13:21	1
2-Fluorobiphenyl (Surr)	87		33 - 126	04/17/26 05:59	04/23/26 13:21	1
2-Fluorophenol (Surr)	61		12 - 120	04/17/26 05:59	04/23/26 13:21	1
Nitrobenzene-d5 (Surr)	100		36 - 120	04/17/26 05:59	04/23/26 13:21	1
Phenol-d6 (Surr)	39		10 - 120	04/17/26 05:59	04/23/26 13:21	1
p-Terphenyl-d14 (Surr)	90		47 - 131	04/17/26 05:59	04/23/26 13:21	1

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: MB 570-725816/1-A**  
**Matrix: Water**  
**Analysis Batch: 727477**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 725816**

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
2-Methylnaphthalene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Acenaphthene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Acenaphthylene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Anthracene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Benzo[a]anthracene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Benzo[a]pyrene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Chrysene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Fluoranthene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Fluorene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Naphthalene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Phenanthrene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1
Pyrene	<0.20		0.20	ug/L		04/17/26 05:59	04/21/26 10:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	93		28 - 127	04/17/26 05:59	04/21/26 10:15	1
2-Fluorobiphenyl (Surr)	88		31 - 120	04/17/26 05:59	04/21/26 10:15	1
2-Fluorophenol (Surr)	57		17 - 120	04/17/26 05:59	04/21/26 10:15	1
Nitrobenzene-d5 (Surr)	90		27 - 120	04/17/26 05:59	04/21/26 10:15	1
Phenol-d6 (Surr)	34		10 - 120	04/17/26 05:59	04/21/26 10:15	1
p-Terphenyl-d14 (Surr)	83		45 - 120	04/17/26 05:59	04/21/26 10:15	1

**Lab Sample ID: LCS 570-725816/2-A**  
**Matrix: Water**  
**Analysis Batch: 727477**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 725816**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	20.0	14.5		ug/L		72	47 - 120
2-Methylnaphthalene	20.0	14.2		ug/L		71	43 - 120
Acenaphthene	20.0	17.3		ug/L		86	60 - 132
Acenaphthylene	20.0	17.1		ug/L		85	54 - 126
Anthracene	20.0	17.2		ug/L		86	43 - 120
Benzo[a]anthracene	20.0	17.5		ug/L		87	42 - 133
Benzo[a]pyrene	20.0	18.6		ug/L		93	32 - 148
Benzo[b]fluoranthene	20.0	18.5		ug/L		93	42 - 140
Benzo[g,h,i]perylene	20.0	18.0		ug/L		90	1 - 195
Benzo[k]fluoranthene	20.0	18.1		ug/L		90	25 - 146
Chrysene	20.0	17.7		ug/L		88	44 - 140
Dibenz(a,h)anthracene	20.0	17.8		ug/L		89	1 - 200
Fluoranthene	20.0	18.0		ug/L		90	43 - 121
Fluorene	20.0	17.9		ug/L		89	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	18.0		ug/L		90	1 - 151
Naphthalene	20.0	14.3		ug/L		71	36 - 120

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: LCS 570-725816/2-A**

**Matrix: Water**

**Analysis Batch: 727477**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 725816**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Phenanthrene	20.0	18.0		ug/L		90	65 - 120	
Pyrene	20.0	18.7		ug/L		94	70 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	90		28 - 127
2-Fluorobiphenyl (Surr)	92		31 - 120
2-Fluorophenol (Surr)	67		17 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120
Phenol-d6 (Surr)	41		10 - 120
p-Terphenyl-d14 (Surr)	93		45 - 120

**Lab Sample ID: LCSD 570-725816/3-A**

**Matrix: Water**

**Analysis Batch: 727477**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 725816**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
1-Methylnaphthalene	20.0	14.8		ug/L		74	47 - 120	2	20	
2-Methylnaphthalene	20.0	14.4		ug/L		72	43 - 120	1	20	
Acenaphthene	20.0	18.0		ug/L		90	60 - 132	4	29	
Acenaphthylene	20.0	18.3		ug/L		91	54 - 126	7	45	
Anthracene	20.0	18.3		ug/L		91	43 - 120	6	40	
Benzo[a]anthracene	20.0	18.4		ug/L		92	42 - 133	5	32	
Benzo[a]pyrene	20.0	19.7		ug/L		99	32 - 148	6	43	
Benzo[b]fluoranthene	20.0	19.0		ug/L		95	42 - 140	3	43	
Benzo[g,h,i]perylene	20.0	18.8		ug/L		94	1 - 195	5	61	
Benzo[k]fluoranthene	20.0	18.8		ug/L		94	25 - 146	4	38	
Chrysene	20.0	18.7		ug/L		93	44 - 140	5	53	
Dibenz(a,h)anthracene	20.0	19.2		ug/L		96	1 - 200	7	75	
Fluoranthene	20.0	19.0		ug/L		95	43 - 121	6	40	
Fluorene	20.0	18.7		ug/L		94	70 - 120	5	23	
Indeno[1,2,3-cd]pyrene	20.0	18.7		ug/L		94	1 - 151	4	60	
Naphthalene	20.0	14.3		ug/L		72	36 - 120	1	39	
Phenanthrene	20.0	19.0		ug/L		95	65 - 120	6	24	
Pyrene	20.0	19.4		ug/L		97	70 - 120	4	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	90		28 - 127
2-Fluorobiphenyl (Surr)	92		31 - 120
2-Fluorophenol (Surr)	68		17 - 120
Nitrobenzene-d5 (Surr)	75		27 - 120
Phenol-d6 (Surr)	42		10 - 120
p-Terphenyl-d14 (Surr)	95		45 - 120

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: MB 570-728183/6**  
**Matrix: Water**  
**Analysis Batch: 728183**

**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			04/22/26 12:24	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		38 - 134				04/22/26 12:24	1

**Lab Sample ID: LCS 570-728183/3**  
**Matrix: Water**  
**Analysis Batch: 728183**

**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	413		ug/L		103	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		38 - 134				

**Lab Sample ID: LCSD 570-728183/4**  
**Matrix: Water**  
**Analysis Batch: 728183**

**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	413		ug/L		103	78 - 120	0	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	106		38 - 134						

**Lab Sample ID: MRL 570-728183/5**  
**Matrix: Water**  
**Analysis Batch: 728183**

**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	14.7		ug/L		147	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		38 - 134				

**Lab Sample ID: 380-208348-B-1 MS**  
**Matrix: Water**  
**Analysis Batch: 728183**

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

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

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

**Lab Sample ID: 380-208348-B-1 MSD**  
**Matrix: Water**  
**Analysis Batch: 728183**

**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	371		ug/L		93	68 - 122	7	18
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
4-Bromofluorobenzene (Surr)	101		38 - 134								

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

**Lab Sample ID: MB 570-727059/1-A**  
**Matrix: Water**  
**Analysis Batch: 727283**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 727059**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		04/20/26 12:52	04/21/26 02:34	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		04/20/26 12:52	04/21/26 02:34	1
C8-C18	<25		25	ug/L		04/20/26 12:52	04/21/26 02:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
n-Octacosane (Surr)	102		60 - 130			04/20/26 12:52	04/21/26 02:34	1

**Lab Sample ID: LCS 570-727059/7-A**  
**Matrix: Water**  
**Analysis Batch: 727683**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 727059**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1600		ug/L		100	56 - 127		
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
n-Octacosane (Surr)	118		60 - 130						

**Lab Sample ID: LCSD 570-727059/8-A**  
**Matrix: Water**  
**Analysis Batch: 727683**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 727059**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1640		ug/L		102	56 - 127	2	23
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
n-Octacosane (Surr)	120		60 - 130						

**Lab Sample ID: MRL 570-727059/4-A**  
**Matrix: Water**  
**Analysis Batch: 727283**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 727059**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	0.0200	0.0208	J	mg/L		104	50 - 150		

Eurofins Pomona

# QC Sample Results

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 570-727059/4-A  
Matrix: Water  
Analysis Batch: 727283

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 727059

<i>Surrogate</i>	<i>MRL</i>	<i>MRL</i>	<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>n-Octacosane (Surr)</i>	124		60 - 130

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# QC Association Summary

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

Job ID: 380-208741-1  
 SDG: Weekly: Halawa Shaft Viewing Pool

## GC/MS Semi VOA

### Prep Batch: 222001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	525.2	
MB 380-222001/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-222001/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-222001/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-222001/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-209008-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-209010-T-1-A DU	Duplicate	Total/NA	Water	525.2	

### Analysis Batch: 222409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	525.2	222001
MB 380-222001/21-A	Method Blank	Total/NA	Water	525.2	222001
LCS 380-222001/23-A	Lab Control Sample	Total/NA	Water	525.2	222001
LCSD 380-222001/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	222001
MRL 380-222001/22-A	Lab Control Sample	Total/NA	Water	525.2	222001
380-209008-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	222001
380-209010-T-1-A DU	Duplicate	Total/NA	Water	525.2	222001

### Prep Batch: 725816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1	
MB 570-725816/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-725816/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-725816/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

### Analysis Batch: 727477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1 SIM	725816
MB 570-725816/1-A	Method Blank	Total/NA	Water	625.1 SIM	725816
LCS 570-725816/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	725816
LCSD 570-725816/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	725816

### Analysis Batch: 728832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1	725816
MB 570-725816/1-A	Method Blank	Total/NA	Water	625.1	725816

## GC VOA

### Analysis Batch: 728183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	8015B GRO LL	
380-208741-2	TB: HALAWA SHAFT Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-728183/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-728183/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-728183/4	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-728183/5	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-208348-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-208348-B-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: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

## GC Semi VOA

### Prep Batch: 727059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	3510C	
MB 570-727059/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-727059/7-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-727059/8-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-727059/4-A	Lab Control Sample	Total/NA	Water	3510C	

### Analysis Batch: 727283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-208741-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	8015B	727059
MB 570-727059/1-A	Method Blank	Total/NA	Water	8015B	727059
MRL 570-727059/4-A	Lab Control Sample	Total/NA	Water	8015B	727059

### Analysis Batch: 727683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-727059/7-A	Lab Control Sample	Total/NA	Water	8015B	727059
LCSD 570-727059/8-A	Lab Control Sample Dup	Total/NA	Water	8015B	727059

## Lab Chronicle

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

**Client Sample ID: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-1**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			222001	OTM3	EA POM	04/22/26 10:13
Total/NA	Analysis	525.2		1	222409	UPAC	EA POM	04/23/26 17:39
Total/NA	Prep	625.1			725816	H1SH	EET CAL 4	04/17/26 16:18
Total/NA	Analysis	625.1		1	728832	PQS1	EET CAL 4	04/23/26 13:45
Total/NA	Prep	625.1			725816	H1SH	EET CAL 4	04/17/26 16:18
Total/NA	Analysis	625.1 SIM		1	727477	PQS1	EET CAL 4	04/21/26 15:21
Total/NA	Analysis	8015B GRO LL		1	728183	A9VE	EET CAL 4	04/22/26 19:29
Total/NA	Prep	3510C			727059	EP2G	EET CAL 4	04/20/26 13:20
Total/NA	Analysis	8015B		1	727283	H6FE	EET CAL 4	04/21/26 04:00

**Client Sample ID: TB: HALAWA SHAFT Viewing Pool**

**Lab Sample ID: 380-208741-2**

Date Collected: 04/14/26 09:35

Matrix: Water

Date Received: 04/16/26 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	728183	A9VE	EET CAL 4	04/22/26 19:52

**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: 380-208741-1  
 SDG: Weekly: Halawa Shaft Viewing Pool

## 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 the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Water	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

## 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: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

## 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	04-27-26
Oregon	NELAP	4175	02-02-27
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-27
Washington	State	C916	10-12-26

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# Method Summary

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

Job ID: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

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: 380-208741-1  
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-208741-1	HALAWA SHAFT Viewing Pool	Water	04/14/26 09:35	04/16/26 10:10	Hawaii
380-208741-2	TB: HALAWA SHAFT Viewing Pool	Water	04/14/26 09:35	04/16/26 10:10	Hawaii

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## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-208741-1  
SDG Number: Weekly: Halawa Shaft Viewing Pool

**Login Number: 208741**

**List Number: 1**

**Creator: Del Rosario, Michael**

**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: 380-208741-1  
SDG Number: Weekly: Halawa Shaft Viewing Pool

**Login Number: 208741**

**List Number: 2**

**Creator: Khana, Piyush**

**List Source: Eurofins Calscience**

**List Creation: 04/17/26 01:57 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ 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	1.4
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 <6mm (1/4").	True	fgf5
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	