

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 8/27/2025 10:18:37 PM

JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-166309-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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

Generated
8/27/2025 10:18:37 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	14
QC Association Summary	30
Lab Chronicle	32
Certification Summary	33
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	39



Definitions/Glossary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS 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.

GC/MS Semi VOA TICs

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

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased

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: 380-166309-1

Job ID: 380-166309-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-166309-1

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 8/14/2025 10:24 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 1.4°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/sample duplicate (MS/MSD/DUP) associated with preparation batch 570-613010.

Method 625.1 SIM

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/sample duplicate (MS/MSD/DUP) associated with preparation batch 570-613010.

Method 625.1 SIM

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The method reporting limit check (MRL) for preparation batch 570-612680 and analytical batch 570-616108 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

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

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

No Detections.

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-2

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

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

Client Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

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		08/18/25 07:55	08/18/25 18:51	1
2,4'-DDD	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
2,4'-DDE	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
2,4'-DDT	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
2-Methylnaphthalene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
4,4'-DDD	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
4,4'-DDE	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
4,4'-DDT	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Acenaphthene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Acenaphthylene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Acetochlor	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Alachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
alpha-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
alpha-Chlordane	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Anthracene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 18:51	1
Atrazine	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Benzo[a]pyrene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 18:51	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 18:51	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 18:51	1
beta-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		08/18/25 07:55	08/18/25 18:51	1
Bromacil	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Butachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 18:51	1
Chlorobenzilate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Chloroneb	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Chlorpyrifos	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Chrysene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 18:51	1
delta-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		08/18/25 07:55	08/18/25 18:51	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Dieldrin	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Diethylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 18:51	1
Dimethylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 18:51	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		08/18/25 07:55	08/18/25 18:51	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Endosulfan sulfate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Endrin	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Endrin aldehyde	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
EPTC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Fluoranthene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
gamma-Chlordane	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Heptachlor	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Isophorone	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Lindane	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Malathion	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Methoxychlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Metolachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Molinate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Naphthalene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Parathion	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Phenanthrene	<0.039		0.039	ug/L		08/18/25 07:55	08/18/25 18:51	1
Propachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Pyrene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Simazine	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Terbacil	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Terbutylazine	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Thiobencarb	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		08/18/25 07:55	08/18/25 18:51	1
trans-Nonachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 18:51	1
Trifluralin	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 18:51	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	08/18/25 07:55	08/18/25 18:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	95		70 - 130	08/18/25 07:55	08/18/25 18:51	1
Perylene-d12	86		70 - 130	08/18/25 07:55	08/18/25 18:51	1
Triphenylphosphate	97		70 - 130	08/18/25 07:55	08/18/25 18:51	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		08/18/25 09:36	08/21/25 16:25	1
2-Methylnaphthalene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Acenaphthene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Acenaphthylene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Anthracene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Benzo[a]anthracene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Benzo[a]pyrene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Chrysene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Fluoranthene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

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		08/18/25 09:36	08/21/25 16:25	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Naphthalene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Phenanthrene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1
Pyrene	<0.19		0.19	ug/L		08/18/25 09:36	08/21/25 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	71		28 - 127	08/18/25 09:36	08/21/25 16:25	1
2-Fluorobiphenyl (Surr)	71		31 - 120	08/18/25 09:36	08/21/25 16:25	1
2-Fluorophenol (Surr)	49		17 - 120	08/18/25 09:36	08/21/25 16:25	1
Nitrobenzene-d5 (Surr)	76		27 - 120	08/18/25 09:36	08/21/25 16:25	1
Phenol-d6 (Surr)	31		10 - 120	08/18/25 09:36	08/21/25 16:25	1
p-Terphenyl-d14 (Surr)	71		45 - 120	08/18/25 09:36	08/21/25 16:25	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	08/18/25 09:36	08/27/25 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	69		33 - 139	08/18/25 09:36	08/27/25 19:49	1
2-Fluorobiphenyl (Surr)	75		33 - 126	08/18/25 09:36	08/27/25 19:49	1
2-Fluorophenol (Surr)	52		12 - 120	08/18/25 09:36	08/27/25 19:49	1
Nitrobenzene-d5 (Surr)	76		36 - 120	08/18/25 09:36	08/27/25 19:49	1
Phenol-d6 (Surr)	27		10 - 120	08/18/25 09:36	08/27/25 19:49	1
p-Terphenyl-d14 (Surr)	87		47 - 131	08/18/25 09:36	08/27/25 19:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/24/25 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		08/24/25 19:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		08/17/25 14:45	08/25/25 05:54	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		08/17/25 14:45	08/25/25 05:54	1
C8-C18	<25		25	ug/L		08/17/25 14:45	08/25/25 05:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	72		60 - 130	08/17/25 14:45	08/25/25 05:54	1

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-2

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/25/25 01:52	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-2

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
4-Bromofluorobenzene (Surr)	88		38 - 134		08/25/25 01:52	1

Action Limit Summary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

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	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.019		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	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0097		ug/L	0.2	0.0097	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: 380-166309-1
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)
380-165934-I-1-A MS	Matrix Spike	95	92	107
380-166309-1	Halawa Shaft Viewing Pool	95	86	97
380-166534-Q-1-A DU	Duplicate	97	80	100
LCS 380-169040/21-A	Lab Control Sample	95	94	99
LCSD 380-169040/22-A	Lab Control Sample Dup	95	94	98
MB 380-169040/19-A	Method Blank	96	83	95
MRL 380-169040/20-A	Lab Control Sample	95	81	101
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)
380-166309-1	Halawa Shaft Viewing Pool	69	75	52	76	27	87
MB 570-613010/1-A	Method Blank	62	77	61	82	31	88
Surrogate Legend							
TBP = 2,4,6-Tribromophenol (Surr)							
FBP = 2-Fluorobiphenyl (Surr)							
2FP = 2-Fluorophenol (Surr)							
NBZ = Nitrobenzene-d5 (Surr)							
PHL6 = Phenol-d6 (Surr)							
TPHd14 = p-Terphenyl-d14 (Surr)							

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)
380-166309-1	Halawa Shaft Viewing Pool	71	71	49	76	31	71
LCS 570-613010/2-A	Lab Control Sample	73	81	64	71	43	75
LCSD 570-613010/3-A	Lab Control Sample Dup	69	73	65	66	45	70
MB 570-613010/1-A	Method Blank	70	74	53	78	34	74
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

Job ID: 380-166309-1

Project/Site: RED-HILL

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)
380-165934-C-1 MS	Matrix Spike	98
380-165934-C-1 MSD	Matrix Spike Duplicate	96
380-166309-1	Halawa Shaft Viewing Pool	89
380-166309-2	TB: Halawa Shaft Viewing Pool	88
LCS 570-615990/1008	Lab Control Sample	98
LCSD 570-615990/9	Lab Control Sample Dup	97
MB 570-615990/10	Method Blank	84
MRL 570-615990/1003	Lab Control Sample	88
Surrogate Legend		
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)
380-165934-B-1-A MS	Matrix Spike	93
380-165934-B-1-B MSD	Matrix Spike Duplicate	96
380-166309-1	Halawa Shaft Viewing Pool	72
LCS 570-612680/2-A	Lab Control Sample	96
LCSD 570-612680/3-A	Lab Control Sample Dup	90
MB 570-612680/1-A	Method Blank	85
MRL 570-612680/4-A	Lab Control Sample	91
Surrogate Legend		
OTCSN = n-Octacosane (Surr)		

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-169040/19-A
Matrix: Water
Analysis Batch: 169094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 169040

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2,4'-DDD	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2,4'-DDE	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2,4'-DDT	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
2-Methylnaphthalene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
4,4'-DDD	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
4,4'-DDE	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
4,4'-DDT	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Acenaphthene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Acenaphthylene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Acetochlor	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Alachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
alpha-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
alpha-Chlordane	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Anthracene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 15:48	1
Atrazine	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Benzo[a]pyrene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 15:48	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 15:48	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 15:48	1
beta-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		08/18/25 07:55	08/18/25 15:48	1
Bromacil	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Butachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 15:48	1
Chlorobenzilate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Chloroneb	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Chlorpyrifos	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Chrysene	<0.019		0.019	ug/L		08/18/25 07:55	08/18/25 15:48	1
delta-BHC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		08/18/25 07:55	08/18/25 15:48	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Dieldrin	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Diethylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 15:48	1
Dimethylphthalate	<0.49		0.49	ug/L		08/18/25 07:55	08/18/25 15:48	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		08/18/25 07:55	08/18/25 15:48	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Endosulfan sulfate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Endrin	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Endrin aldehyde	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
EPTC	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-169040/19-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 169040

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Fluorene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
gamma-Chlordane	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Heptachlor	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Isophorone	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Lindane	<0.0097		0.0097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Malathion	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Methoxychlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Metolachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Molinate	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Naphthalene	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Parathion	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Phenanthrene	<0.039		0.039	ug/L		08/18/25 07:55	08/18/25 15:48	1
Propachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Pyrene	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Simazine	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Terbacil	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Terbutylazine	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Thiobencarb	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		08/18/25 07:55	08/18/25 15:48	1
trans-Nonachlor	<0.049		0.049	ug/L		08/18/25 07:55	08/18/25 15:48	1
Trifluralin	<0.097		0.097	ug/L		08/18/25 07:55	08/18/25 15:48	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Plumbane, diethyldimethyl-	0.514	T J N	ug/L		3.25	1762-27-2	08/18/25 07:55	08/18/25 15:48	1
Cyclohexasiloxane, dodecamethyl-	1.07	T J N	ug/L		3.86	540-97-6	08/18/25 07:55	08/18/25 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	08/18/25 07:55	08/18/25 15:48	1
Perylene-d12	83		70 - 130	08/18/25 07:55	08/18/25 15:48	1
Triphenylphosphate	95		70 - 130	08/18/25 07:55	08/18/25 15:48	1

Lab Sample ID: LCS 380-169040/21-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.95	1.94		ug/L		99	70 - 130
2,4'-DDD	1.95	2.03		ug/L		104	70 - 130
2,4'-DDE	1.95	2.01		ug/L		103	70 - 130
2,4'-DDT	1.95	1.91		ug/L		98	70 - 130
2,4-Dinitrotoluene	1.95	1.90		ug/L		98	70 - 130
2,6-Dinitrotoluene	1.95	1.87		ug/L		96	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-169040/21-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	1.95	1.82		ug/L		94	70 - 130
4,4'-DDD	1.95	2.05		ug/L		105	70 - 130
4,4'-DDE	1.95	1.93		ug/L		99	70 - 130
4,4'-DDT	1.95	2.00		ug/L		103	70 - 130
Acenaphthene	1.95	1.86		ug/L		95	70 - 130
Acenaphthylene	1.95	1.91		ug/L		98	70 - 130
Acetochlor	1.95	2.08		ug/L		107	70 - 130
Alachlor	1.95	2.12		ug/L		109	70 - 130
alpha-BHC	1.95	1.93		ug/L		99	70 - 130
alpha-Chlordane	1.95	1.99		ug/L		102	70 - 130
Anthracene	1.95	1.90		ug/L		98	70 - 130
Atrazine	1.95	2.02		ug/L		103	70 - 130
Benz(a)anthracene	1.95	1.85		ug/L		95	70 - 130
Benzo[a]pyrene	1.95	1.88		ug/L		96	70 - 130
Benzo[b]fluoranthene	1.95	1.89		ug/L		97	70 - 130
Benzo[g,h,i]perylene	1.95	1.86		ug/L		96	70 - 130
Benzo[k]fluoranthene	1.95	1.90		ug/L		97	70 - 130
beta-BHC	1.95	2.01		ug/L		103	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.88		ug/L		96	70 - 130
Bromacil	1.95	1.92		ug/L		99	70 - 130
Butachlor	1.95	2.25		ug/L		115	70 - 130
Butylbenzylphthalate	1.95	1.93		ug/L		99	70 - 130
Chlorobenzilate	1.95	2.07		ug/L		106	70 - 130
Chloroneb	1.95	1.95		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	1.94		ug/L		99	70 - 130
Chlorpyrifos	1.95	2.12		ug/L		109	70 - 130
Chrysene	1.95	2.01		ug/L		103	70 - 130
delta-BHC	1.95	1.88		ug/L		96	70 - 130
Di(2-ethylhexyl)adipate	1.95	1.88		ug/L		96	70 - 130
Dibenz(a,h)anthracene	1.95	1.78		ug/L		91	70 - 130
Diclorvos (DDVP)	1.95	2.04		ug/L		104	70 - 130
Dieldrin	1.95	1.93		ug/L		99	70 - 130
Diethylphthalate	1.95	2.03		ug/L		104	70 - 130
Dimethylphthalate	1.95	1.97		ug/L		101	70 - 130
Di-n-butyl phthalate	3.90	4.76		ug/L		122	70 - 130
Di-n-octyl phthalate	1.95	1.88		ug/L		97	70 - 130
Endosulfan I (Alpha)	1.95	1.76		ug/L		90	70 - 130
Endosulfan II (Beta)	1.95	1.93		ug/L		99	70 - 130
Endosulfan sulfate	1.95	1.98		ug/L		101	70 - 130
Endrin	1.95	2.02		ug/L		104	70 - 130
Endrin aldehyde	1.95	1.72		ug/L		88	60 - 130
EPTC	1.95	2.03		ug/L		104	70 - 130
Fluoranthene	1.95	2.05		ug/L		105	70 - 130
Fluorene	1.95	1.98		ug/L		101	70 - 130
gamma-Chlordane	1.95	2.06		ug/L		106	70 - 130
Heptachlor	1.95	2.19		ug/L		112	70 - 130
Heptachlor epoxide (isomer B)	1.95	2.06		ug/L		106	70 - 130
Hexachlorobenzene	1.95	1.93		ug/L		99	70 - 130
Hexachlorocyclopentadiene	1.95	1.94		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-169040/21-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	1.95	1.81		ug/L		93	70 - 130
Isophorone	1.95	1.94		ug/L		99	70 - 130
Lindane	1.95	2.11		ug/L		108	70 - 130
Malathion	1.95	2.09		ug/L		107	70 - 130
Methoxychlor	1.95	2.16		ug/L		111	70 - 130
Metolachlor	1.95	2.17		ug/L		111	70 - 130
Molinate	1.95	2.04		ug/L		104	70 - 130
Naphthalene	1.95	1.80		ug/L		92	70 - 130
Parathion	1.95	2.06		ug/L		105	70 - 130
Pendimethalin (Penoxaline)	1.95	1.91		ug/L		98	70 - 130
Phenanthrene	1.95	1.85		ug/L		95	70 - 130
Propachlor	1.95	2.04		ug/L		105	70 - 130
Pyrene	1.95	2.04		ug/L		105	70 - 130
Simazine	1.95	2.10		ug/L		107	70 - 130
Terbacil	1.95	2.04		ug/L		104	70 - 130
Terbutylazine	1.95	2.16		ug/L		111	70 - 130
Thiobencarb	1.95	2.20		ug/L		113	70 - 130
trans-Nonachlor	1.95	2.01		ug/L		103	70 - 130
Trifluralin	1.95	1.93		ug/L		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	99		70 - 130

Lab Sample ID: LCSD 380-169040/22-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.95	1.95		ug/L		100	70 - 130	1	20
2,4'-DDD	1.95	1.99		ug/L		102	70 - 130	2	20
2,4'-DDE	1.95	2.04		ug/L		105	70 - 130	1	20
2,4'-DDT	1.95	1.90		ug/L		98	70 - 130	0	20
2,4-Dinitrotoluene	1.95	1.90		ug/L		98	70 - 130	0	20
2,6-Dinitrotoluene	1.95	1.87		ug/L		96	70 - 130	0	20
2-Methylnaphthalene	1.95	1.83		ug/L		94	70 - 130	1	20
4,4'-DDD	1.95	2.04		ug/L		105	70 - 130	0	20
4,4'-DDE	1.95	1.96		ug/L		101	70 - 130	2	20
4,4'-DDT	1.95	1.97		ug/L		101	70 - 130	1	20
Acenaphthene	1.95	1.87		ug/L		96	70 - 130	0	20
Acenaphthylene	1.95	1.94		ug/L		100	70 - 130	1	20
Acetochlor	1.95	2.03		ug/L		104	70 - 130	3	20
Alachlor	1.95	2.10		ug/L		108	70 - 130	1	20
alpha-BHC	1.95	1.89		ug/L		97	70 - 130	2	20
alpha-Chlordane	1.95	1.98		ug/L		102	70 - 130	1	20
Anthracene	1.95	1.88		ug/L		96	70 - 130	1	20
Atrazine	1.95	2.06		ug/L		106	70 - 130	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-169040/22-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benz(a)anthracene	1.95	1.91		ug/L		98	70 - 130	3	20
Benzo[a]pyrene	1.95	1.88		ug/L		96	70 - 130	0	20
Benzo[b]fluoranthene	1.95	1.94		ug/L		100	70 - 130	2	20
Benzo[g,h,i]perylene	1.95	1.96		ug/L		101	70 - 130	5	20
Benzo[k]fluoranthene	1.95	1.91		ug/L		98	70 - 130	1	20
beta-BHC	1.95	1.96		ug/L		101	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	1.95	1.85		ug/L		95	70 - 130	1	20
Bromacil	1.95	2.08		ug/L		107	70 - 130	8	20
Butachlor	1.95	2.21		ug/L		114	70 - 130	2	20
Butylbenzylphthalate	1.95	1.89		ug/L		97	70 - 130	2	20
Chlorobenzilate	1.95	2.00		ug/L		103	70 - 130	3	20
Chloroneb	1.95	1.94		ug/L		100	70 - 130	0	20
Chlorothalonil (Draconil, Bravo)	1.95	1.92		ug/L		99	70 - 130	1	20
Chlorpyrifos	1.95	2.13		ug/L		109	70 - 130	1	20
Chrysene	1.95	2.00		ug/L		103	70 - 130	0	20
delta-BHC	1.95	1.84		ug/L		95	70 - 130	2	20
Di(2-ethylhexyl)adipate	1.95	1.90		ug/L		97	70 - 130	1	20
Dibenz(a,h)anthracene	1.95	1.86		ug/L		96	70 - 130	4	20
Diclorvos (DDVP)	1.95	2.04		ug/L		105	70 - 130	0	20
Dieldrin	1.95	1.86		ug/L		95	70 - 130	4	20
Diethylphthalate	1.95	2.01		ug/L		104	70 - 130	1	20
Dimethylphthalate	1.95	1.98		ug/L		102	70 - 130	0	20
Di-n-butyl phthalate	3.89	4.67		ug/L		120	70 - 130	2	20
Di-n-octyl phthalate	1.95	1.90		ug/L		97	70 - 130	1	20
Endosulfan I (Alpha)	1.95	1.76		ug/L		91	70 - 130	0	20
Endosulfan II (Beta)	1.95	1.88		ug/L		97	70 - 130	3	20
Endosulfan sulfate	1.95	1.95		ug/L		100	70 - 130	1	20
Endrin	1.95	1.97		ug/L		101	70 - 130	3	20
Endrin aldehyde	1.95	1.70		ug/L		88	60 - 130	1	20
EPTC	1.95	2.00		ug/L		103	70 - 130	1	20
Fluoranthene	1.95	2.10		ug/L		108	70 - 130	2	20
Fluorene	1.95	1.96		ug/L		100	70 - 130	1	20
gamma-Chlordane	1.95	2.04		ug/L		105	70 - 130	1	20
Heptachlor	1.95	2.21		ug/L		114	70 - 130	1	20
Heptachlor epoxide (isomer B)	1.95	2.06		ug/L		106	70 - 130	0	20
Hexachlorobenzene	1.95	1.92		ug/L		98	70 - 130	1	20
Hexachlorocyclopentadiene	1.95	1.98		ug/L		102	70 - 130	2	20
Indeno[1,2,3-cd]pyrene	1.95	1.87		ug/L		96	70 - 130	3	20
Isophorone	1.95	1.95		ug/L		100	70 - 130	1	20
Lindane	1.95	2.04		ug/L		105	70 - 130	3	20
Malathion	1.95	2.09		ug/L		108	70 - 130	0	20
Methoxychlor	1.95	2.06		ug/L		106	70 - 130	4	20
Metolachlor	1.95	2.15		ug/L		111	70 - 130	1	20
Molinate	1.95	2.03		ug/L		104	70 - 130	0	20
Naphthalene	1.95	1.84		ug/L		95	70 - 130	2	20
Parathion	1.95	2.06		ug/L		106	70 - 130	0	20
Pendimethalin (Penoxaline)	1.95	1.86		ug/L		96	70 - 130	2	20
Phenanthrene	1.95	1.82		ug/L		93	70 - 130	2	20
Propachlor	1.95	2.04		ug/L		105	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-169040/22-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene	1.95	2.11		ug/L		108	70 - 130	3	20
Simazine	1.95	2.15		ug/L		111	70 - 130	3	20
Terbacil	1.95	2.12		ug/L		109	70 - 130	4	20
Terbuthylazine	1.95	2.17		ug/L		111	70 - 130	1	20
Thiobencarb	1.95	2.18		ug/L		112	70 - 130	1	20
trans-Nonachlor	1.95	1.97		ug/L		101	70 - 130	2	20
Trifluralin	1.95	1.87		ug/L		96	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	98		70 - 130

Lab Sample ID: MRL 380-169040/20-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0974	0.0982		ug/L		101	50 - 150
2,4'-DDD	0.0974	0.0846	J	ug/L		87	50 - 150
2,4'-DDE	0.0974	0.100		ug/L		103	50 - 150
2,4'-DDT	0.0974	0.114		ug/L		117	50 - 150
2,4-Dinitrotoluene	0.0974	0.0859	J	ug/L		88	50 - 150
2,6-Dinitrotoluene	0.0974	0.111		ug/L		114	50 - 150
2-Methylnaphthalene	0.0974	0.0993		ug/L		102	50 - 150
4,4'-DDD	0.0974	0.0987		ug/L		101	50 - 150
4,4'-DDE	0.0974	0.0914	J	ug/L		94	50 - 150
4,4'-DDT	0.0974	0.113		ug/L		116	50 - 150
Acenaphthene	0.0974	0.0939	J	ug/L		96	50 - 150
Acenaphthylene	0.0974	0.0883	J	ug/L		91	50 - 150
Acetochlor	0.0974	0.106		ug/L		109	50 - 150
Alachlor	0.0487	0.0464	J	ug/L		95	50 - 150
alpha-BHC	0.0974	0.0968	J	ug/L		99	50 - 150
alpha-Chlordane	0.0243	<0.028		ug/L		103	50 - 150
Anthracene	0.0195	0.0205		ug/L		105	50 - 150
Atrazine	0.0487	0.0553		ug/L		113	50 - 150
Benz(a)anthracene	0.0487	0.0506		ug/L		104	50 - 150
Benzo[a]pyrene	0.0195	0.0177	J	ug/L		91	50 - 150
Benzo[b]fluoranthene	0.0195	0.0226		ug/L		116	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0359	J	ug/L		74	50 - 150
Benzo[k]fluoranthene	0.0195	0.0207		ug/L		107	50 - 150
beta-BHC	0.0974	0.112		ug/L		115	50 - 150
Bis(2-ethylhexyl) phthalate	0.584	0.529	J	ug/L		91	50 - 150
Bromacil	0.0974	0.0966	J	ug/L		99	50 - 150
Butachlor	0.0487	0.0525		ug/L		108	50 - 150
Butylbenzylphthalate	0.487	0.478	J	ug/L		98	50 - 150
Chlorobenzilate	0.0974	0.0947	J	ug/L		97	50 - 150
Chloroneb	0.0974	0.105		ug/L		107	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-169040/20-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chlorothalonil (Draconil, Bravo)	0.0974	0.0946	J	ug/L		97	50 - 150
Chlorpyrifos	0.0487	0.0510		ug/L		105	50 - 150
Chrysene	0.0195	0.0206		ug/L		106	50 - 150
delta-BHC	0.0974	0.0942	J	ug/L		97	50 - 150
Di(2-ethylhexyl)adipate	0.584	0.567	J	ug/L		97	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0439	J	ug/L		90	50 - 150
Diclorvos (DDVP)	0.0487	0.0567		ug/L		116	50 - 150
Dieldrin	0.00974	0.0141		ug/L		145	50 - 150
Diethylphthalate	0.487	0.517		ug/L		106	50 - 150
Dimethylphthalate	0.487	0.501		ug/L		103	50 - 150
Di-n-butyl phthalate	0.487	0.653	J	ug/L		134	49 - 243
Di-n-octyl phthalate	0.0974	0.0855	J	ug/L		88	50 - 150
Endosulfan I (Alpha)	0.0974	0.0810	J	ug/L		83	50 - 150
Endosulfan II (Beta)	0.0974	0.112		ug/L		115	50 - 150
Endosulfan sulfate	0.0974	0.0922	J	ug/L		95	50 - 150
Endrin	0.00974	0.00780	J	ug/L		80	50 - 150
Endrin aldehyde	0.0974	0.0961	J	ug/L		99	50 - 150
EPTC	0.0974	0.0968	J	ug/L		99	50 - 150
Fluoranthene	0.0974	0.0954	J	ug/L		98	50 - 150
Fluorene	0.0487	0.0499		ug/L		102	50 - 150
gamma-Chlordane	0.0243	0.0251	J	ug/L		103	50 - 150
Heptachlor	0.00974	0.00981		ug/L		101	50 - 150
Heptachlor epoxide (isomer B)	0.00974	0.0103		ug/L		105	50 - 150
Hexachlorobenzene	0.0487	0.0477	J	ug/L		98	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0547		ug/L		112	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0413	J	ug/L		85	50 - 150
Isophorone	0.0974	0.111		ug/L		114	50 - 150
Lindane	0.00974	0.0104		ug/L		107	50 - 150
Malathion	0.0974	0.0988		ug/L		101	50 - 150
Methoxychlor	0.0487	0.0532		ug/L		109	50 - 150
Metolachlor	0.0487	0.0510		ug/L		105	50 - 150
Molinate	0.0974	0.101		ug/L		104	50 - 150
Naphthalene	0.0974	0.0909	J	ug/L		93	50 - 150
Parathion	0.0974	0.0804	J	ug/L		83	50 - 150
Pendimethalin (Penoxaline)	0.0974	0.0981		ug/L		101	50 - 150
Phenanthrene	0.0389	0.0402		ug/L		103	50 - 150
Propachlor	0.0487	0.0512		ug/L		105	50 - 150
Pyrene	0.0487	0.0489	J	ug/L		100	50 - 150
Simazine	0.0487	0.0415	J	ug/L		85	50 - 150
Terbacil	0.0974	0.0893	J	ug/L		92	50 - 150
Terbuthylazine	0.0974	0.101		ug/L		103	50 - 150
Thiobencarb	0.0974	0.0990		ug/L		102	50 - 150
trans-Nonachlor	0.0243	<0.025		ug/L		93	50 - 150
Trifluralin	0.0974	0.0982		ug/L		101	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	81		70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-169040/20-A

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 169040

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Triphenylphosphate	101		70 - 130

Lab Sample ID: 380-165934-I-1-A MS

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.96	1.98		ug/L		101	70 - 130
2,4'-DDD	<0.097		1.96	2.13		ug/L		109	70 - 130
2,4'-DDE	<0.097		1.96	2.05		ug/L		104	70 - 130
2,4'-DDT	<0.097		1.96	1.90		ug/L		97	70 - 130
2,4-Dinitrotoluene	<0.097		1.96	1.90		ug/L		97	70 - 130
2,6-Dinitrotoluene	<0.097		1.96	1.85		ug/L		94	70 - 130
2-Methylnaphthalene	<0.097		1.96	1.88		ug/L		95	70 - 130
4,4'-DDD	<0.097		1.96	2.18		ug/L		111	70 - 130
4,4'-DDE	<0.097		1.96	1.98		ug/L		101	70 - 130
4,4'-DDT	<0.097		1.96	1.99		ug/L		101	70 - 130
Acenaphthene	<0.097		1.96	1.91		ug/L		97	70 - 130
Acenaphthylene	<0.097		1.96	1.97		ug/L		101	70 - 130
Acetochlor	<0.097		1.96	2.07		ug/L		105	70 - 130
Alachlor	<0.049		1.96	2.05		ug/L		104	70 - 130
alpha-BHC	<0.097		1.96	1.92		ug/L		98	70 - 130
alpha-Chlordane	<0.049		1.96	2.13		ug/L		107	70 - 130
Anthracene	<0.019		1.96	1.92		ug/L		98	70 - 130
Atrazine	<0.049		1.96	2.11		ug/L		107	70 - 130
Benz(a)anthracene	<0.049		1.96	1.93		ug/L		98	70 - 130
Benzo[a]pyrene	<0.019		1.96	1.90		ug/L		97	70 - 130
Benzo[b]fluoranthene	<0.019		1.96	1.99		ug/L		101	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	1.83		ug/L		93	70 - 130
Benzo[k]fluoranthene	<0.019		1.96	1.86		ug/L		95	70 - 130
beta-BHC	<0.097		1.96	2.05		ug/L		104	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.96	1.58		ug/L		81	70 - 130
Bromacil	<0.097		1.96	1.98		ug/L		99	70 - 130
Butachlor	<0.049		1.96	2.35		ug/L		120	70 - 130
Butylbenzylphthalate	<0.49		1.96	2.15		ug/L		110	70 - 130
Chlorobenzilate	<0.097		1.96	2.27		ug/L		116	70 - 130
Chloroneb	<0.097		1.96	1.95		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.96	2.02		ug/L		103	70 - 130
Chlorpyrifos	<0.049		1.96	2.11		ug/L		108	70 - 130
Chrysene	<0.019		1.96	2.02		ug/L		103	70 - 130
delta-BHC	<0.097		1.96	1.93		ug/L		99	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.96	1.78		ug/L		91	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	1.71		ug/L		87	70 - 130
Diclorvos (DDVP)	<0.049		1.96	2.06		ug/L		105	70 - 130
Dieldrin	0.031		1.96	2.07		ug/L		104	70 - 130
Diethylphthalate	<0.49		1.96	2.04		ug/L		104	70 - 130
Dimethylphthalate	<0.49		1.96	1.99		ug/L		101	70 - 130
Di-n-butyl phthalate	<0.97		3.92	4.35		ug/L		111	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-165934-I-1-A MS

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-octyl phthalate	<0.097		1.96	1.58		ug/L		81	70 - 130
Endosulfan I (Alpha)	<0.097		1.96	1.90		ug/L		97	70 - 130
Endosulfan II (Beta)	<0.097		1.96	2.05		ug/L		105	70 - 130
Endosulfan sulfate	<0.097		1.96	2.11		ug/L		107	70 - 130
Endrin	<0.0097		1.96	2.19		ug/L		112	70 - 130
Endrin aldehyde	<0.097		1.96	1.79		ug/L		91	60 - 130
EPTC	<0.097		1.96	1.98		ug/L		101	70 - 130
Fluoranthene	<0.097		1.96	2.20		ug/L		112	70 - 130
Fluorene	<0.049		1.96	1.96		ug/L		100	70 - 130
gamma-Chlordane	<0.049		1.96	2.14		ug/L		109	70 - 130
Heptachlor	<0.0097		1.96	2.22		ug/L		113	70 - 130
Heptachlor epoxide (isomer B)	0.0099		1.96	2.17		ug/L		110	70 - 130
Hexachlorobenzene	<0.049		1.96	1.94		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.02		ug/L		103	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.76		ug/L		90	70 - 130
Isophorone	<0.097		1.96	1.92		ug/L		98	70 - 130
Lindane	<0.0097		1.96	2.14		ug/L		109	70 - 130
Malathion	<0.097		1.96	2.07		ug/L		106	70 - 130
Methoxychlor	<0.049		1.96	2.17		ug/L		111	70 - 130
Metolachlor	<0.049		1.96	2.14		ug/L		109	70 - 130
Molinate	<0.097		1.96	2.05		ug/L		105	70 - 130
Naphthalene	<0.097		1.96	1.86		ug/L		95	70 - 130
Parathion	<0.097		1.96	2.01		ug/L		102	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.96	1.94		ug/L		99	70 - 130
Phenanthrene	<0.039		1.96	1.88		ug/L		96	70 - 130
Propachlor	<0.049		1.96	2.09		ug/L		106	70 - 130
Pyrene	<0.049		1.96	2.25		ug/L		115	70 - 130
Simazine	<0.049		1.96	2.18		ug/L		111	70 - 130
Terbacil	<0.097		1.96	2.14		ug/L		109	70 - 130
Terbutylazine	<0.097		1.96	2.24		ug/L		114	70 - 130
Thiobencarb	<0.097		1.96	2.15		ug/L		110	70 - 130
trans-Nonachlor	<0.049		1.96	2.09		ug/L		106	70 - 130
Trifluralin	<0.097		1.96	1.94		ug/L		99	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	107		70 - 130

Lab Sample ID: 380-166534-Q-1-A DU

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 169040

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-166534-Q-1-A DU

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
2,4-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2,6-Dinitrotoluene	<0.097		<0.097		ug/L		NC	20
2-Methylnaphthalene	<0.097		<0.097		ug/L		NC	20
4,4'-DDD	<0.097		<0.097		ug/L		NC	20
4,4'-DDE	<0.097		<0.097		ug/L		NC	20
4,4'-DDT	<0.097		<0.097		ug/L		NC	20
Acenaphthene	<0.097		<0.097		ug/L		NC	20
Acenaphthylene	<0.097		<0.097		ug/L		NC	20
Acetochlor	<0.097		<0.097		ug/L		NC	20
Alachlor	<0.049		<0.048		ug/L		NC	20
alpha-BHC	<0.097		<0.097		ug/L		NC	20
alpha-Chlordane	<0.049		<0.048		ug/L		NC	20
Anthracene	<0.019		<0.019		ug/L		NC	20
Atrazine	<0.049		<0.048		ug/L		NC	20
Benz(a)anthracene	<0.049		<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	<0.049		<0.048		ug/L		NC	20
Benzo[k]fluoranthene	<0.019		<0.019		ug/L		NC	20
beta-BHC	<0.097		<0.097		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.58		<0.58		ug/L		NC	20
Bromacil	<0.097		<0.097		ug/L		NC	20
Butachlor	<0.049		<0.048		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.48		ug/L		NC	20
Chlorobenzilate	<0.097		<0.097		ug/L		NC	20
Chloroneb	<0.097		<0.097		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.097		<0.097		ug/L		NC	20
Chlorpyrifos	<0.049		<0.048		ug/L		NC	20
Chrysene	<0.019		<0.019		ug/L		NC	20
delta-BHC	<0.097		<0.097		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.58		<0.58		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.048		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.048		ug/L		NC	20
Dieldrin	<0.0097		<0.0097		ug/L		NC	20
Diethylphthalate	<0.49		<0.48		ug/L		NC	20
Dimethylphthalate	<0.49		<0.48		ug/L		NC	20
Di-n-butyl phthalate	<0.97		<0.97		ug/L		NC	20
Di-n-octyl phthalate	<0.097		<0.097		ug/L		NC	20
Endosulfan I (Alpha)	<0.097		<0.097		ug/L		NC	20
Endosulfan II (Beta)	<0.097		<0.097		ug/L		NC	20
Endosulfan sulfate	<0.097		<0.097		ug/L		NC	20
Endrin	<0.0097		<0.0097		ug/L		NC	20
Endrin aldehyde	<0.097		<0.097		ug/L		NC	20
EPTC	<0.097		<0.097		ug/L		NC	20
Fluoranthene	<0.097		<0.097		ug/L		NC	20
Fluorene	<0.049		<0.048		ug/L		NC	20
gamma-Chlordane	<0.049		<0.048		ug/L		NC	20
Heptachlor	<0.0097		<0.0097		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0097		<0.0097		ug/L		NC	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-166534-Q-1-A DU

Matrix: Water

Analysis Batch: 169094

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 169040

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Hexachlorobenzene	<0.049		<0.048		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.048		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.048		ug/L		NC	20
Isophorone	<0.097		<0.097		ug/L		NC	20
Lindane	<0.0097		<0.0097		ug/L		NC	20
Malathion	<0.097		<0.097		ug/L		NC	20
Methoxychlor	<0.049		<0.048		ug/L		NC	20
Metolachlor	<0.049		<0.048		ug/L		NC	20
Molinate	<0.097		<0.097		ug/L		NC	20
Naphthalene	<0.097		<0.097		ug/L		NC	20
Parathion	<0.097		<0.097		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.097		<0.097		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.048		ug/L		NC	20
Pyrene	<0.049		<0.048		ug/L		NC	20
Simazine	<0.049		<0.048		ug/L		NC	20
Terbacil	<0.097		<0.097		ug/L		NC	20
Terbuthylazine	<0.097		<0.097		ug/L		NC	20
Thiobencarb	<0.097		<0.097		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.19		<0.19		ug/L		NC	20
trans-Nonachlor	<0.049		<0.048		ug/L		NC	20
Trifluralin	<0.097		<0.097		ug/L		NC	20

Surrogate	%Recovery	Qualifier	Limits
2-Nitro-m-xylene	97		70 - 130
Perylene-d12	80		70 - 130
Triphenylphosphate	100		70 - 130

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

Lab Sample ID: MB 570-613010/1-A

Matrix: Water

Analysis Batch: 617703

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 613010

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	08/18/25 09:36	08/27/25 15:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	62		33 - 139	08/18/25 09:36	08/27/25 15:55	1
2-Fluorobiphenyl (Surr)	77		33 - 126	08/18/25 09:36	08/27/25 15:55	1
2-Fluorophenol (Surr)	61		12 - 120	08/18/25 09:36	08/27/25 15:55	1
Nitrobenzene-d5 (Surr)	82		36 - 120	08/18/25 09:36	08/27/25 15:55	1
Phenol-d6 (Surr)	31		10 - 120	08/18/25 09:36	08/27/25 15:55	1
p-Terphenyl-d14 (Surr)	88		47 - 131	08/18/25 09:36	08/27/25 15:55	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-613010/1-A

Matrix: Water

Analysis Batch: 614860

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 613010

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
2-Methylnaphthalene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Acenaphthene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Acenaphthylene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Anthracene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Benzo[a]anthracene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Benzo[a]pyrene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Chrysene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Fluoranthene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Fluorene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Naphthalene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Phenanthrene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1
Pyrene	<0.20		0.20	ug/L		08/18/25 09:36	08/21/25 14:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	70		28 - 127	08/18/25 09:36	08/21/25 14:55	1
2-Fluorobiphenyl (Surr)	74		31 - 120	08/18/25 09:36	08/21/25 14:55	1
2-Fluorophenol (Surr)	53		17 - 120	08/18/25 09:36	08/21/25 14:55	1
Nitrobenzene-d5 (Surr)	78		27 - 120	08/18/25 09:36	08/21/25 14:55	1
Phenol-d6 (Surr)	34		10 - 120	08/18/25 09:36	08/21/25 14:55	1
p-Terphenyl-d14 (Surr)	74		45 - 120	08/18/25 09:36	08/21/25 14:55	1

Lab Sample ID: LCS 570-613010/2-A

Matrix: Water

Analysis Batch: 614860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 613010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	18.5		ug/L		93	47 - 120
2-Methylnaphthalene	20.0	18.2		ug/L		91	43 - 120
Acenaphthene	20.0	20.8		ug/L		104	60 - 132
Acenaphthylene	20.0	21.4		ug/L		107	54 - 126
Anthracene	20.0	18.2		ug/L		91	43 - 120
Benzo[a]anthracene	20.0	18.8		ug/L		94	42 - 133
Benzo[a]pyrene	20.0	18.1		ug/L		91	32 - 148
Benzo[b]fluoranthene	20.0	17.6		ug/L		88	42 - 140
Benzo[g,h,i]perylene	20.0	19.1		ug/L		95	1 - 195
Benzo[k]fluoranthene	20.0	18.1		ug/L		91	25 - 146
Chrysene	20.0	18.4		ug/L		92	44 - 140
Dibenz(a,h)anthracene	20.0	19.4		ug/L		97	1 - 200
Fluoranthene	20.0	18.7		ug/L		93	43 - 121
Fluorene	20.0	21.8		ug/L		109	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	18.3		ug/L		91	1 - 151
Naphthalene	20.0	17.9		ug/L		89	36 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-613010/2-A

Matrix: Water

Analysis Batch: 614860

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 613010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	17.8		ug/L		89	65 - 120
Pyrene	20.0	19.9		ug/L		99	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	73		28 - 127
2-Fluorobiphenyl (Surr)	81		31 - 120
2-Fluorophenol (Surr)	64		17 - 120
Nitrobenzene-d5 (Surr)	71		27 - 120
Phenol-d6 (Surr)	43		10 - 120
p-Terphenyl-d14 (Surr)	75		45 - 120

Lab Sample ID: LCSD 570-613010/3-A

Matrix: Water

Analysis Batch: 614860

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 613010

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	17.0		ug/L		85	47 - 120	8	20
2-Methylnaphthalene	20.0	16.6		ug/L		83	43 - 120	9	20
Acenaphthene	20.0	19.2		ug/L		96	60 - 132	8	29
Acenaphthylene	20.0	20.1		ug/L		100	54 - 126	6	45
Anthracene	20.0	17.3		ug/L		86	43 - 120	5	40
Benzo[a]anthracene	20.0	17.9		ug/L		90	42 - 133	5	32
Benzo[a]pyrene	20.0	17.3		ug/L		86	32 - 148	5	43
Benzo[b]fluoranthene	20.0	17.3		ug/L		87	42 - 140	2	43
Benzo[g,h,i]perylene	20.0	17.9		ug/L		90	1 - 195	6	61
Benzo[k]fluoranthene	20.0	17.1		ug/L		86	25 - 146	5	38
Chrysene	20.0	17.5		ug/L		87	44 - 140	5	53
Dibenz(a,h)anthracene	20.0	18.0		ug/L		90	1 - 200	8	75
Fluoranthene	20.0	17.8		ug/L		89	43 - 121	5	40
Fluorene	20.0	20.3		ug/L		102	70 - 120	7	23
Indeno[1,2,3-cd]pyrene	20.0	17.1		ug/L		86	1 - 151	6	60
Naphthalene	20.0	16.4		ug/L		82	36 - 120	9	39
Phenanthrene	20.0	17.0		ug/L		85	65 - 120	5	24
Pyrene	20.0	19.0		ug/L		95	70 - 120	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	69		28 - 127
2-Fluorobiphenyl (Surr)	73		31 - 120
2-Fluorophenol (Surr)	65		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	45		10 - 120
p-Terphenyl-d14 (Surr)	70		45 - 120

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-615990/10

Matrix: Water

Analysis Batch: 615990

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			08/24/25 15:17	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		38 - 134				08/24/25 15:17	1

Lab Sample ID: LCS 570-615990/1008

Matrix: Water

Analysis Batch: 615990

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	371		ug/L		93	78 - 120	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	98		38 - 134					

Lab Sample ID: LCSD 570-615990/9

Matrix: Water

Analysis Batch: 615990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	400	393		ug/L		98	78 - 120	6	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	97		38 - 134						

Lab Sample ID: MRL 570-615990/1003

Matrix: Water

Analysis Batch: 615990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (C4-C13)	10.0	8.61	J	ug/L		86	50 - 150	
Surrogate	MRL %Recovery	MRL Qualifier	Limits					
4-Bromofluorobenzene (Surr)	88		38 - 134					

Lab Sample ID: 380-165934-C-1 MS

Matrix: Water

Analysis Batch: 615990

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	375		ug/L		94	68 - 122	
Surrogate	MS %Recovery	MS Qualifier	Limits							
4-Bromofluorobenzene (Surr)	98		38 - 134							

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-165934-C-1 MSD

Matrix: Water

Analysis Batch: 615990

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	370		ug/L		92	68 - 122	2	18
Surrogate	%Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	96		38 - 134								

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

Lab Sample ID: MB 570-612680/1-A

Matrix: Water

Analysis Batch: 614435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 612680

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics (C10-C24)	<25		25	ug/L		08/16/25 15:51	08/20/25 23:33		1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		08/16/25 15:51	08/20/25 23:33		1
C8-C18	<25		25	ug/L		08/16/25 15:51	08/20/25 23:33		1
	MB	MB							
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
n-Octacosane (Surr)	85		60 - 130			08/16/25 15:51	08/20/25 23:33		1

Lab Sample ID: LCS 570-612680/2-A

Matrix: Water

Analysis Batch: 614435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 612680

			Spike	LCS	LCS						
Analyte			Added	Result	Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			1600	1540	^3+	ug/L		96	56 - 127		
		LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits								
n-Octacosane (Surr)	96		60 - 130								

Lab Sample ID: LCSD 570-612680/3-A

Matrix: Water

Analysis Batch: 614435

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 612680

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
C10-C28			1600	1440	^3+	ug/L		90	56 - 127	7	23
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
n-Octacosane (Surr)	90		60 - 130								

Lab Sample ID: MRL 570-612680/4-A

Matrix: Water

Analysis Batch: 616108

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 612680

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	0.0200	0.337	^3+	mg/L		1683	50 - 150		

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 570-612680/4-A

Matrix: Water

Analysis Batch: 616108

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 612680

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	91		60 - 130

Lab Sample ID: 380-165934-B-1-A MS

Matrix: Water

Analysis Batch: 614435

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 612680

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C10-C28	<26		1610	1570		ug/L		97	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	93		60 - 130

Lab Sample ID: 380-165934-B-1-B MSD

Matrix: Water

Analysis Batch: 614435

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 612680

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
C10-C28	<26		1620	1620		ug/L		100	70 - 130	3	20	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
n-Octacosane (Surr)	96		60 - 130

QC Association Summary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 169040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	525.2	
MB 380-169040/19-A	Method Blank	Total/NA	Water	525.2	
LCS 380-169040/21-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-169040/22-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-169040/20-A	Lab Control Sample	Total/NA	Water	525.2	
380-165934-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-166534-Q-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 169094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	525.2	169040
MB 380-169040/19-A	Method Blank	Total/NA	Water	525.2	169040
LCS 380-169040/21-A	Lab Control Sample	Total/NA	Water	525.2	169040
LCSD 380-169040/22-A	Lab Control Sample Dup	Total/NA	Water	525.2	169040
MRL 380-169040/20-A	Lab Control Sample	Total/NA	Water	525.2	169040
380-165934-I-1-A MS	Matrix Spike	Total/NA	Water	525.2	169040
380-166534-Q-1-A DU	Duplicate	Total/NA	Water	525.2	169040

Prep Batch: 613010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1	
MB 570-613010/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-613010/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-613010/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 614860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1 SIM	613010
MB 570-613010/1-A	Method Blank	Total/NA	Water	625.1 SIM	613010
LCS 570-613010/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	613010
LCSD 570-613010/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	613010

Analysis Batch: 617703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1	613010
MB 570-613010/1-A	Method Blank	Total/NA	Water	625.1	613010

GC VOA

Analysis Batch: 615990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
380-166309-2	TB: Halawa Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-615990/10	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-615990/1008	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-615990/9	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-615990/1003	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-165934-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-165934-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: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC Semi VOA

Prep Batch: 612680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	3510C	
MB 570-612680/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-612680/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-612680/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-612680/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-165934-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-165934-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 614435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-612680/1-A	Method Blank	Total/NA	Water	8015B	612680
LCS 570-612680/2-A	Lab Control Sample	Total/NA	Water	8015B	612680
LCSD 570-612680/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	612680
380-165934-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	612680
380-165934-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	612680

Analysis Batch: 616108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-166309-1	Halawa Shaft Viewing Pool	Total/NA	Water	8015B	612680
MRL 570-612680/4-A	Lab Control Sample	Total/NA	Water	8015B	612680

Lab Chronicle

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-1

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			169040	KRD3	EA POM	08/18/25 07:55
Total/NA	Analysis	525.2		1	169094	Q8LA	EA POM	08/18/25 18:51
Total/NA	Prep	625.1			613010	H1SH	EET CAL 4	08/18/25 09:36
Total/NA	Analysis	625.1		1	617703	AX7Z	EET CAL 4	08/27/25 19:49
Total/NA	Prep	625.1			613010	H1SH	EET CAL 4	08/18/25 09:36
Total/NA	Analysis	625.1 SIM		1	614860	PQS1	EET CAL 4	08/21/25 16:25
Total/NA	Analysis	8015B GRO LL		1	615990	W4LC	EET CAL 4	08/24/25 19:50
Total/NA	Prep	3510C			612680	H6FE	EET CAL 4	08/17/25 14:45
Total/NA	Analysis	8015B		1	616108	H6FE	EET CAL 4	08/25/25 05:54

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-166309-2

Date Collected: 08/12/25 09:30

Matrix: Water

Date Received: 08/14/25 10:24

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	615990	W4LC	EET CAL 4	08/25/25 01:52

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Laboratory: Eurofins Eaton Analytical Pomona

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
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	03-02-26
Arizona	State	AZ0830	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-166309-1
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	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-25

Method Summary

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

Job ID: 380-166309-1
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 Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Sample Summary

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

Job ID: 380-166309-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-166309-1	Halawa Shaft Viewing Pool	Water	08/12/25 09:30	08/14/25 10:24	Hawaii
380-166309-2	TB: Halawa Shaft Viewing Pool	Water	08/12/25 09:30	08/14/25 10:24	Hawaii

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

eurolins | Envij

[illegible]

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

Chain of Custody Record



Loc: 380

166309

[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-166309-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 166309

List Number: 1

Creator: Sanchez Velasquez, Gustavo

List Source: Eurofins Eaton Analytical Pomona

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-166309-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 166309

List Source: Eurofins Calscience

List Number: 2

List Creation: 08/15/25 02:40 PM

Creator: Ferreira, Bruno

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	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	