

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 8/20/2025 8:12:59 PM

JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-164862-1

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
8/20/2025 8:12:59 PM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
QC Sample Results	14
QC Association Summary	26
Lab Chronicle	28
Certification Summary	29
Method Summary	31
Sample Summary	32
Chain of Custody	33
Receipt Checklists	35



Definitions/Glossary

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA TICs

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

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: 380-164862-1

Job ID: 380-164862-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-164862-1

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 8/7/2025 9:34 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 1.3°C.

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

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

Eurofins Eaton Analytical Pomona

Detection Summary

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

☐ No Detections.

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-2

☐ 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: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2,4'-DDD	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2,4'-DDE	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2,4'-DDT	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2,4-Dinitrotoluene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2,6-Dinitrotoluene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
2-Methylnaphthalene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
4,4'-DDD	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
4,4'-DDE	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
4,4'-DDT	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Acenaphthene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Acenaphthylene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Acetochlor	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Alachlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
alpha-BHC	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
alpha-Chlordane	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Anthracene	<0.019		0.019	ug/L		08/08/25 09:36	08/10/25 12:28	1
Atrazine	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Benz(a)anthracene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Benzo[a]pyrene	<0.019		0.019	ug/L		08/08/25 09:36	08/10/25 12:28	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		08/08/25 09:36	08/10/25 12:28	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		08/08/25 09:36	08/10/25 12:28	1
beta-BHC	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Bis(2-ethylhexyl) phthalate	<0.57		0.57	ug/L		08/08/25 09:36	08/10/25 12:28	1
Bromacil	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Butachlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Butylbenzylphthalate	<0.48		0.48	ug/L		08/08/25 09:36	08/10/25 12:28	1
Chlorobenzilate	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Chloroneb	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Chlorpyrifos	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Chrysene	<0.019		0.019	ug/L		08/08/25 09:36	08/10/25 12:28	1
delta-BHC	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Di(2-ethylhexyl)adipate	<0.57		0.57	ug/L		08/08/25 09:36	08/10/25 12:28	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Dieldrin	<0.0096		0.0096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Diethylphthalate	<0.48		0.48	ug/L		08/08/25 09:36	08/10/25 12:28	1
Dimethylphthalate	<0.48		0.48	ug/L		08/08/25 09:36	08/10/25 12:28	1
Di-n-butyl phthalate	<0.96		0.96	ug/L		08/08/25 09:36	08/10/25 12:28	1
Di-n-octyl phthalate	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Endosulfan I (Alpha)	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Endosulfan II (Beta)	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Endosulfan sulfate	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Endrin	<0.0096		0.0096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Endrin aldehyde	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
EPTC	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Fluoranthene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

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		08/08/25 09:36	08/10/25 12:28	1
gamma-Chlordane	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Heptachlor	<0.0096		0.0096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Hexachlorobenzene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Isophorone	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Lindane	<0.0096		0.0096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Malathion	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Methoxychlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Metolachlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Molinate	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Naphthalene	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Parathion	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Pendimethalin (Penoxaline)	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Phenanthrene	<0.038		0.038	ug/L		08/08/25 09:36	08/10/25 12:28	1
Propachlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Pyrene	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Simazine	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Terbacil	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Terbutylazine	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Thiobencarb	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		08/08/25 09:36	08/10/25 12:28	1
trans-Nonachlor	<0.048		0.048	ug/L		08/08/25 09:36	08/10/25 12:28	1
Trifluralin	<0.096		0.096	ug/L		08/08/25 09:36	08/10/25 12:28	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	08/08/25 09:36	08/10/25 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	98		70 - 130	08/08/25 09:36	08/10/25 12:28	1
Perylene-d12	94		70 - 130	08/08/25 09:36	08/10/25 12:28	1
Triphenylphosphate	104		70 - 130	08/08/25 09:36	08/10/25 12:28	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		08/11/25 05:56	08/15/25 15:05	1
2-Methylnaphthalene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Acenaphthene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Acenaphthylene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Anthracene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Benzo[a]anthracene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Benzo[a]pyrene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Chrysene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Fluoranthene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

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		08/11/25 05:56	08/15/25 15:05	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Naphthalene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Phenanthrene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1
Pyrene	<0.19		0.19	ug/L		08/11/25 05:56	08/15/25 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		28 - 127	08/11/25 05:56	08/15/25 15:05	1
2-Fluorobiphenyl (Surr)	81		31 - 120	08/11/25 05:56	08/15/25 15:05	1
2-Fluorophenol (Surr)	42		17 - 120	08/11/25 05:56	08/15/25 15:05	1
Nitrobenzene-d5 (Surr)	78		27 - 120	08/11/25 05:56	08/15/25 15:05	1
Phenol-d6 (Surr)	26		10 - 120	08/11/25 05:56	08/15/25 15:05	1
p-Terphenyl-d14 (Surr)	88		45 - 120	08/11/25 05:56	08/15/25 15:05	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
Unknown	11	T J	ug/L		2.67	N/A	08/11/25 05:56	08/20/25 18:23	1
3-Fluoropyridine	10	T J N	ug/L		2.89	372-47-4	08/11/25 05:56	08/20/25 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	73		33 - 139	08/11/25 05:56	08/20/25 18:23	1
2-Fluorobiphenyl (Surr)	86		33 - 126	08/11/25 05:56	08/20/25 18:23	1
2-Fluorophenol (Surr)	64		12 - 120	08/11/25 05:56	08/20/25 18:23	1
Nitrobenzene-d5 (Surr)	88		36 - 120	08/11/25 05:56	08/20/25 18:23	1
Phenol-d6 (Surr)	38		10 - 120	08/11/25 05:56	08/20/25 18:23	1
p-Terphenyl-d14 (Surr)	97		47 - 131	08/11/25 05:56	08/20/25 18:23	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			08/16/25 17:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		38 - 134		08/16/25 17:28	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		08/11/25 11:43	08/16/25 09:55	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		08/11/25 11:43	08/16/25 09:55	1
C8-C18	<25		25	ug/L		08/11/25 11:43	08/16/25 09:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	119		60 - 130	08/11/25 11:43	08/16/25 09:55	1

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-2

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

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			08/16/25 22:21	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-2

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

<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)	82		38 - 134		08/16/25 22:21	1

Action Limit Summary

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

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	<0.57		ug/L	6	0.57	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.57		ug/L	400	0.57	525.2	Total/NA
Endrin	<0.0096		ug/L	2	0.0096	525.2	Total/NA
Heptachlor	<0.0096		ug/L	0.4	0.0096	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0096		ug/L	0.2	0.0096	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	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Methoxychlor	<0.048		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: 380-164862-1
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)
380-164742-B-2-B MS	Matrix Spike	101	90	135 S1+
380-164742-B-2-C MSD	Matrix Spike Duplicate	99	98	127
380-164862-1	Halawa Shaft Viewing Pool	98	94	104
LCS 380-167479/23-A	Lab Control Sample	95	94	99
MB 380-167479/21-A	Method Blank	96	92	111
MRL 380-167479/22-A	Lab Control Sample	96	90	98
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)
380-164862-1	Halawa Shaft Viewing Pool	73	86	64	88	38	97
MB 570-609628/1-A	Method Blank	88	86	55	96	32	101
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)
380-164862-1	Halawa Shaft Viewing Pool	88	81	42	78	26	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: 8015B GRO LL - Gasoline Range Organics - (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (38-134)	
380-164502-C-1 MS	Matrix Spike	92	

Eurofins Eaton Analytical Pomona

Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-164862-1

Project/Site: RED-HILL

SDG: Weekly: Halawa Shaft Viewing Pool

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-164502-C-1 MSD	Matrix Spike Duplicate	91
380-164862-1	Halawa Shaft Viewing Pool	85
380-164862-2	TB: Halawa Shaft Viewing Pool	82
LCS 570-612596/3	Lab Control Sample	92
LCSD 570-612596/4	Lab Control Sample Dup	91
MB 570-612596/5	Method Blank	80
MRL 570-612596/6	Lab Control Sample	83

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)
380-164502-B-1-A MS	Matrix Spike	117
380-164502-B-1-B MSD	Matrix Spike Duplicate	121
380-164862-1	Halawa Shaft Viewing Pool	119
LCS 570-609844/2-A	Lab Control Sample	111
LCSD 570-609844/3-A	Lab Control Sample Dup	111
MB 570-609844/1-A	Method Blank	109
MRL 570-609844/4-A	Lab Control Sample	113

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-167479/21-A
Matrix: Water
Analysis Batch: 167693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 167479

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2,4'-DDD	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2,4'-DDE	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2,4'-DDT	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
2-Methylnaphthalene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
4,4'-DDD	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
4,4'-DDE	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
4,4'-DDT	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Acenaphthene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Acenaphthylene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Acetochlor	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Alachlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
alpha-BHC	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
alpha-Chlordane	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Anthracene	<0.020		0.020	ug/L		08/08/25 09:36	08/10/25 09:47	1
Atrazine	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Benz(a)anthracene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Benzo[a]pyrene	<0.020		0.020	ug/L		08/08/25 09:36	08/10/25 09:47	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		08/08/25 09:36	08/10/25 09:47	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		08/08/25 09:36	08/10/25 09:47	1
beta-BHC	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		08/08/25 09:36	08/10/25 09:47	1
Bromacil	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Butachlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Butylbenzylphthalate	<0.49		0.49	ug/L		08/08/25 09:36	08/10/25 09:47	1
Chlorobenzilate	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Chloroneb	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Chlorpyrifos	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Chrysene	<0.020		0.020	ug/L		08/08/25 09:36	08/10/25 09:47	1
delta-BHC	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		08/08/25 09:36	08/10/25 09:47	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Dieldrin	<0.0098		0.0098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Diethylphthalate	<0.49		0.49	ug/L		08/08/25 09:36	08/10/25 09:47	1
Dimethylphthalate	<0.49		0.49	ug/L		08/08/25 09:36	08/10/25 09:47	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		08/08/25 09:36	08/10/25 09:47	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Endosulfan sulfate	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Endrin	<0.0098		0.0098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Endrin aldehyde	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
EPTC	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1

Euofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-167479/21-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 167479

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Fluorene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
gamma-Chlordane	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Heptachlor	<0.0098		0.0098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Hexachlorobenzene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Isophorone	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Lindane	<0.0098		0.0098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Malathion	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Methoxychlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Metolachlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Molinate	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Naphthalene	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Parathion	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Phenanthrene	<0.039		0.039	ug/L		08/08/25 09:36	08/10/25 09:47	1
Propachlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Pyrene	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Simazine	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Terbacil	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Terbutylazine	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Thiobencarb	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		08/08/25 09:36	08/10/25 09:47	1
trans-Nonachlor	<0.049		0.049	ug/L		08/08/25 09:36	08/10/25 09:47	1
Trifluralin	<0.098		0.098	ug/L		08/08/25 09:36	08/10/25 09:47	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Decane	2.13	T J N	ug/L		2.64	124-18-5	08/08/25 09:36	08/10/25 09:47	1
9-Octadecenamamide, (Z)-	0.843	T J N	ug/L		7.69	301-02-0	08/08/25 09:36	08/10/25 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	08/08/25 09:36	08/10/25 09:47	1
Perylene-d12	92		70 - 130	08/08/25 09:36	08/10/25 09:47	1
Triphenylphosphate	111		70 - 130	08/08/25 09:36	08/10/25 09:47	1

Lab Sample ID: LCS 380-167479/23-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.96	1.82		ug/L		93	70 - 130
2,4'-DDD	1.96	2.07		ug/L		106	70 - 130
2,4'-DDE	1.96	1.88		ug/L		96	70 - 130
2,4'-DDT	1.96	2.05		ug/L		105	70 - 130
2,4-Dinitrotoluene	1.96	2.09		ug/L		107	70 - 130
2,6-Dinitrotoluene	1.96	2.00		ug/L		102	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-167479/23-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	1.96	1.86		ug/L		95	70 - 130
4,4'-DDD	1.96	1.99		ug/L		101	70 - 130
4,4'-DDE	1.96	1.95		ug/L		100	70 - 130
4,4'-DDT	1.96	2.00		ug/L		102	70 - 130
Acenaphthene	1.96	1.94		ug/L		99	70 - 130
Acenaphthylene	1.96	1.97		ug/L		100	70 - 130
Acetochlor	1.96	1.98		ug/L		101	70 - 130
Alachlor	1.96	2.22		ug/L		113	70 - 130
alpha-BHC	1.96	1.97		ug/L		101	70 - 130
alpha-Chlordane	1.96	1.87		ug/L		95	70 - 130
Anthracene	1.96	1.83		ug/L		94	70 - 130
Atrazine	1.96	2.10		ug/L		107	70 - 130
Benz(a)anthracene	1.96	2.10		ug/L		107	70 - 130
Benzo[a]pyrene	1.96	2.18		ug/L		111	70 - 130
Benzo[b]fluoranthene	1.96	2.12		ug/L		108	70 - 130
Benzo[g,h,i]perylene	1.96	1.94		ug/L		99	70 - 130
Benzo[k]fluoranthene	1.96	2.04		ug/L		104	70 - 130
beta-BHC	1.96	2.05		ug/L		105	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	1.98		ug/L		101	70 - 130
Bromacil	1.96	2.22		ug/L		113	70 - 130
Butachlor	1.96	2.15		ug/L		110	70 - 130
Butylbenzylphthalate	1.96	2.15		ug/L		110	70 - 130
Chlorobenzilate	1.96	2.03		ug/L		104	70 - 130
Chloroneb	1.96	1.94		ug/L		99	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	2.02		ug/L		103	70 - 130
Chlorpyrifos	1.96	2.17		ug/L		111	70 - 130
Chrysene	1.96	2.03		ug/L		104	70 - 130
delta-BHC	1.96	1.97		ug/L		101	70 - 130
Di(2-ethylhexyl)adipate	1.96	2.07		ug/L		106	70 - 130
Dibenz(a,h)anthracene	1.96	1.94		ug/L		99	70 - 130
Diclorvos (DDVP)	1.96	2.06		ug/L		105	70 - 130
Dieldrin	1.96	2.04		ug/L		104	70 - 130
Diethylphthalate	1.96	2.03		ug/L		103	70 - 130
Dimethylphthalate	1.96	2.04		ug/L		104	70 - 130
Di-n-butyl phthalate	3.91	4.15		ug/L		106	70 - 130
Di-n-octyl phthalate	1.96	1.96		ug/L		100	70 - 130
Endosulfan I (Alpha)	1.96	2.17		ug/L		111	70 - 130
Endosulfan II (Beta)	1.96	2.14		ug/L		109	70 - 130
Endosulfan sulfate	1.96	1.97		ug/L		101	70 - 130
Endrin	1.96	2.14		ug/L		110	70 - 130
Endrin aldehyde	1.96	1.89		ug/L		97	60 - 130
EPTC	1.96	1.99		ug/L		102	70 - 130
Fluoranthene	1.96	2.04		ug/L		104	70 - 130
Fluorene	1.96	2.04		ug/L		104	70 - 130
gamma-Chlordane	1.96	1.79		ug/L		91	70 - 130
Heptachlor	1.96	1.90		ug/L		97	70 - 130
Heptachlor epoxide (isomer B)	1.96	1.99		ug/L		102	70 - 130
Hexachlorobenzene	1.96	1.88		ug/L		96	70 - 130
Hexachlorocyclopentadiene	1.96	1.98		ug/L		101	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-167479/23-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	1.96	2.00		ug/L		102	70 - 130
Isophorone	1.96	1.90		ug/L		97	70 - 130
Lindane	1.96	2.07		ug/L		106	70 - 130
Malathion	1.96	2.02		ug/L		103	70 - 130
Methoxychlor	1.96	2.15		ug/L		110	70 - 130
Metolachlor	1.96	1.98		ug/L		101	70 - 130
Molinate	1.96	2.03		ug/L		104	70 - 130
Naphthalene	1.96	1.78		ug/L		91	70 - 130
Parathion	1.96	2.13		ug/L		109	70 - 130
Pendimethalin (Penoxaline)	1.96	2.04		ug/L		104	70 - 130
Phenanthrene	1.96	1.94		ug/L		99	70 - 130
Propachlor	1.96	2.13		ug/L		109	70 - 130
Pyrene	1.96	2.17		ug/L		111	70 - 130
Simazine	1.96	2.12		ug/L		108	70 - 130
Terbacil	1.96	2.08		ug/L		106	70 - 130
Terbutylazine	1.96	2.06		ug/L		105	70 - 130
Thiobencarb	1.96	1.92		ug/L		98	70 - 130
trans-Nonachlor	1.96	1.98		ug/L		101	70 - 130
Trifluralin	1.96	1.87		ug/L		95	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: MRL 380-167479/22-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0987	0.107		ug/L		108	50 - 150
2,4'-DDD	0.0987	0.0847	J	ug/L		86	50 - 150
2,4'-DDE	0.0987	0.106		ug/L		107	50 - 150
2,4'-DDT	0.0987	0.114		ug/L		115	50 - 150
2,4-Dinitrotoluene	0.0987	0.102		ug/L		104	50 - 150
2,6-Dinitrotoluene	0.0987	0.132		ug/L		133	50 - 150
2-Methylnaphthalene	0.0987	0.103		ug/L		104	50 - 150
4,4'-DDD	0.0987	0.113		ug/L		114	50 - 150
4,4'-DDE	0.0987	0.0854	J	ug/L		87	50 - 150
4,4'-DDT	0.0987	0.121		ug/L		123	50 - 150
Acenaphthene	0.0987	0.0925	J	ug/L		94	50 - 150
Acenaphthylene	0.0987	0.0910	J	ug/L		92	50 - 150
Acetochlor	0.0987	0.118		ug/L		119	50 - 150
Alachlor	0.0493	0.0534		ug/L		108	50 - 150
alpha-BHC	0.0987	0.102		ug/L		103	50 - 150
alpha-Chlordane	0.0247	<0.029		ug/L		99	50 - 150
Anthracene	0.0197	0.0234		ug/L		118	50 - 150
Atrazine	0.0493	0.0599		ug/L		121	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-167479/22-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benz(a)anthracene	0.0493	0.0665		ug/L		135	50 - 150
Benzo[a]pyrene	0.0197	0.0191	J	ug/L		97	50 - 150
Benzo[b]fluoranthene	0.0197	0.0229		ug/L		116	50 - 150
Benzo[g,h,i]perylene	0.0493	0.0600		ug/L		122	50 - 150
Benzo[k]fluoranthene	0.0197	0.0214		ug/L		108	50 - 150
beta-BHC	0.0987	0.117		ug/L		119	50 - 150
Bis(2-ethylhexyl) phthalate	0.592	0.566	J	ug/L		96	50 - 150
Bromacil	0.0987	0.133		ug/L		135	50 - 150
Butachlor	0.0493	0.0704		ug/L		143	50 - 150
Butylbenzylphthalate	0.493	0.568		ug/L		115	50 - 150
Chlorobenzilate	0.0987	0.119		ug/L		120	50 - 150
Chloroneb	0.0987	0.105		ug/L		107	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0987	0.108		ug/L		110	50 - 150
Chlorpyrifos	0.0493	0.0544		ug/L		110	50 - 150
Chrysene	0.0197	0.0214		ug/L		109	50 - 150
delta-BHC	0.0987	0.0982	J	ug/L		100	50 - 150
Di(2-ethylhexyl)adipate	0.592	0.660		ug/L		112	50 - 150
Dibenz(a,h)anthracene	0.0493	0.0658		ug/L		133	50 - 150
Diclorvos (DDVP)	0.0493	0.0611		ug/L		124	50 - 150
Dieldrin	0.00987	0.0120		ug/L		122	50 - 150
Diethylphthalate	0.493	0.556		ug/L		113	50 - 150
Dimethylphthalate	0.493	0.540		ug/L		109	50 - 150
Di-n-butyl phthalate	0.493	0.603	J	ug/L		122	49 - 243
Di-n-octyl phthalate	0.0987	0.0972	J	ug/L		98	50 - 150
Endosulfan I (Alpha)	0.0987	0.0918	J	ug/L		93	50 - 150
Endosulfan II (Beta)	0.0987	0.110		ug/L		111	50 - 150
Endosulfan sulfate	0.0987	0.121		ug/L		123	50 - 150
Endrin	0.00987	0.0112		ug/L		114	50 - 150
Endrin aldehyde	0.0987	0.0963	J	ug/L		98	50 - 150
EPTC	0.0987	0.101		ug/L		102	50 - 150
Fluoranthene	0.0987	0.101		ug/L		103	50 - 150
Fluorene	0.0493	0.0553		ug/L		112	50 - 150
gamma-Chlordane	0.0247	0.0238	J	ug/L		97	50 - 150
Heptachlor	0.00987	0.0117		ug/L		119	50 - 150
Heptachlor epoxide (isomer B)	0.00987	0.00896	J	ug/L		91	50 - 150
Hexachlorobenzene	0.0493	0.0474	J	ug/L		96	50 - 150
Hexachlorocyclopentadiene	0.0493	0.0536		ug/L		109	50 - 150
Indeno[1,2,3-cd]pyrene	0.0493	0.0668		ug/L		135	50 - 150
Isophorone	0.0987	0.116		ug/L		117	50 - 150
Lindane	0.00987	0.0115		ug/L		116	50 - 150
Malathion	0.0987	0.118		ug/L		119	50 - 150
Methoxychlor	0.0493	0.0739		ug/L		150	50 - 150
Metolachlor	0.0493	0.0657		ug/L		133	50 - 150
Molinate	0.0987	0.107		ug/L		108	50 - 150
Naphthalene	0.0987	0.0830	J	ug/L		84	50 - 150
Parathion	0.0987	0.111		ug/L		112	50 - 150
Pendimethalin (Penoxaline)	0.0987	0.112		ug/L		113	50 - 150
Phenanthrene	0.0395	0.0411		ug/L		104	50 - 150
Propachlor	0.0493	0.0577		ug/L		117	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-167479/22-A

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Pyrene	0.0493	0.0516		ug/L		105	50 - 150
Simazine	0.0493	0.0562		ug/L		114	50 - 150
Terbacil	0.0987	0.123		ug/L		125	50 - 150
Terbuthylazine	0.0987	0.120		ug/L		122	50 - 150
Thiobencarb	0.0987	0.109		ug/L		111	50 - 150
trans-Nonachlor	0.0247	<0.026		ug/L		103	50 - 150
Trifluralin	0.0987	0.110		ug/L		112	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	90		70 - 130
Triphenylphosphate	98		70 - 130

Lab Sample ID: 380-164742-B-2-B MS

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.096		1.92	1.78		ug/L		93	70 - 130
2,4'-DDD	<0.096		1.92	2.15		ug/L		112	70 - 130
2,4'-DDE	<0.096		1.92	1.70		ug/L		89	70 - 130
2,4'-DDT	<0.096		1.92	1.83		ug/L		95	70 - 130
2,4-Dinitrotoluene	<0.096	F1	1.92	2.55	F1	ug/L		133	70 - 130
2,6-Dinitrotoluene	<0.096	F1	1.92	2.56	F1	ug/L		134	70 - 130
2-Methylnaphthalene	<0.096		1.92	1.87		ug/L		98	70 - 130
4,4'-DDD	<0.096		1.92	2.08		ug/L		108	70 - 130
4,4'-DDE	<0.096		1.92	1.81		ug/L		94	70 - 130
4,4'-DDT	<0.096		1.92	1.90		ug/L		99	70 - 130
Acenaphthene	<0.096		1.92	1.90		ug/L		99	70 - 130
Acenaphthylene	<0.096		1.92	2.04		ug/L		107	70 - 130
Acetochlor	<0.096		1.92	2.39		ug/L		125	70 - 130
Alachlor	<0.048	F1	1.92	2.66	F1	ug/L		139	70 - 130
alpha-BHC	<0.096		1.92	2.12		ug/L		111	70 - 130
alpha-Chlordane	<0.048		1.92	1.84		ug/L		96	70 - 130
Anthracene	<0.019	F1	1.92	1.13	F1	ug/L		59	70 - 130
Atrazine	<0.048		1.92	1.95		ug/L		102	70 - 130
Benz(a)anthracene	<0.048		1.92	2.23		ug/L		116	70 - 130
Benzo[a]pyrene	<0.019		1.92	1.88		ug/L		98	70 - 130
Benzo[b]fluoranthene	<0.019		1.92	1.92		ug/L		100	70 - 130
Benzo[g,h,i]perylene	<0.048		1.92	1.57		ug/L		82	70 - 130
Benzo[k]fluoranthene	<0.019		1.92	1.80		ug/L		94	70 - 130
beta-BHC	<0.096		1.92	2.41		ug/L		126	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.92	1.61		ug/L		84	70 - 130
Bromacil	<0.096	F1	1.92	2.71	F1	ug/L		141	70 - 130
Butachlor	<0.048	F1	1.92	2.66	F1	ug/L		139	70 - 130
Butylbenzylphthalate	<0.48	F1	1.92	2.50		ug/L		130	70 - 130
Chlorobenzilate	<0.096	F1	1.92	2.58	F1	ug/L		134	70 - 130
Chloroneb	<0.096		1.92	1.89		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-164742-B-2-B MS

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorothalonil (Draconil, Bravo)	<0.096		1.92	2.12		ug/L		111	70 - 130
Chlorpyrifos	<0.048		1.92	2.27		ug/L		119	70 - 130
Chrysene	<0.019		1.92	1.95		ug/L		102	70 - 130
delta-BHC	<0.096		1.92	2.40		ug/L		125	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.92	1.74		ug/L		91	70 - 130
Dibenz(a,h)anthracene	<0.048		1.92	1.56		ug/L		82	70 - 130
Diclorvos (DDVP)	<0.048		1.92	2.29		ug/L		119	70 - 130
Dieldrin	<0.0096		1.92	2.32		ug/L		121	70 - 130
Diethylphthalate	<0.48		1.92	2.28		ug/L		116	70 - 130
Dimethylphthalate	<0.48		1.92	2.19		ug/L		114	70 - 130
Di-n-butyl phthalate	<0.96	F1	3.84	34.7	E F1	ug/L		905	70 - 130
Di-n-octyl phthalate	<0.096	F1	1.92	1.46		ug/L		76	70 - 130
Endosulfan I (Alpha)	<0.096		1.92	2.32		ug/L		121	70 - 130
Endosulfan II (Beta)	<0.096		1.92	2.44		ug/L		127	70 - 130
Endosulfan sulfate	<0.096		1.92	2.30		ug/L		120	70 - 130
Endrin	<0.0096		1.92	2.47		ug/L		129	70 - 130
Endrin aldehyde	<0.096	F1	1.92	0.279	F1	ug/L		15	60 - 130
EPTC	<0.096		1.92	2.06		ug/L		108	70 - 130
Fluoranthene	<0.096		1.92	2.24		ug/L		117	70 - 130
Fluorene	<0.048		1.92	2.02		ug/L		105	70 - 130
gamma-Chlordane	<0.048		1.92	1.82		ug/L		95	70 - 130
Heptachlor	<0.0096		1.92	2.16		ug/L		112	70 - 130
Heptachlor epoxide (isomer B)	<0.0096		1.92	2.27		ug/L		118	70 - 130
Hexachlorobenzene	<0.048		1.92	1.84		ug/L		96	70 - 130
Hexachlorocyclopentadiene	<0.048		1.92	2.23		ug/L		116	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.92	1.67		ug/L		87	70 - 130
Isophorone	<0.096		1.92	2.04		ug/L		105	70 - 130
Lindane	<0.0096		1.92	2.08		ug/L		109	70 - 130
Malathion	<0.096		1.92	2.41		ug/L		126	70 - 130
Methoxychlor	<0.048		1.92	2.35		ug/L		123	70 - 130
Metolachlor	<0.048		1.92	2.36		ug/L		123	70 - 130
Molinate	<0.096		1.92	2.11		ug/L		110	70 - 130
Naphthalene	<0.096		1.92	1.76		ug/L		92	70 - 130
Parathion	<0.096		1.92	2.46		ug/L		128	70 - 130
Pendimethalin (Penoxaline)	<0.096	F1	1.92	2.64	F1	ug/L		138	70 - 130
Phenanthrene	<0.038		1.92	1.89		ug/L		99	70 - 130
Propachlor	<0.048		1.92	2.36		ug/L		123	70 - 130
Pyrene	<0.048		1.92	2.34		ug/L		122	70 - 130
Simazine	<0.048		1.92	2.01		ug/L		105	70 - 130
Terbacil	<0.096	F1	1.92	2.90	F1	ug/L		151	70 - 130
Terbutylazine	<0.096		1.92	2.00		ug/L		104	70 - 130
Thiobencarb	<0.096		1.92	2.07		ug/L		108	70 - 130
trans-Nonachlor	<0.048		1.92	1.73		ug/L		90	70 - 130
Trifluralin	<0.096		1.92	2.35		ug/L		122	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	90		70 - 130

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-164742-B-2-B MS

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 167479

Surrogate	MS %Recovery	MS Qualifier	Limits
Triphenylphosphate	135	S1+	70 - 130

Lab Sample ID: 380-164742-B-2-C MSD

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.096		1.91	1.75		ug/L		92	70 - 130	1	20
2,4'-DDD	<0.096		1.91	2.10		ug/L		110	70 - 130	2	20
2,4'-DDE	<0.096		1.91	1.64		ug/L		86	70 - 130	4	20
2,4'-DDT	<0.096		1.91	1.75		ug/L		91	70 - 130	5	20
2,4-Dinitrotoluene	<0.096	F1	1.91	2.49		ug/L		130	70 - 130	2	20
2,6-Dinitrotoluene	<0.096	F1	1.91	2.54	F1	ug/L		133	70 - 130	1	20
2-Methylnaphthalene	<0.096		1.91	1.91		ug/L		100	70 - 130	2	20
4,4'-DDD	<0.096		1.91	2.02		ug/L		106	70 - 130	3	20
4,4'-DDE	<0.096		1.91	1.67		ug/L		88	70 - 130	8	20
4,4'-DDT	<0.096		1.91	1.68		ug/L		88	70 - 130	13	20
Acenaphthene	<0.096		1.91	1.90		ug/L		99	70 - 130	0	20
Acenaphthylene	<0.096		1.91	2.05		ug/L		107	70 - 130	0	20
Acetochlor	<0.096		1.91	2.20		ug/L		115	70 - 130	8	20
Alachlor	<0.048	F1	1.91	2.49		ug/L		130	70 - 130	7	20
alpha-BHC	<0.096		1.91	2.01		ug/L		105	70 - 130	6	20
alpha-Chlordane	<0.048		1.91	1.81		ug/L		95	70 - 130	2	20
Anthracene	<0.019	F1	1.91	1.30	F1	ug/L		68	70 - 130	14	20
Atrazine	<0.048		1.91	1.80		ug/L		94	70 - 130	8	20
Benz(a)anthracene	<0.048		1.91	2.20		ug/L		115	70 - 130	1	20
Benzo[a]pyrene	<0.019		1.91	2.02		ug/L		106	70 - 130	7	20
Benzo[b]fluoranthene	<0.019		1.91	2.04		ug/L		107	70 - 130	6	20
Benzo[g,h,i]perylene	<0.048		1.91	1.70		ug/L		89	70 - 130	8	20
Benzo[k]fluoranthene	<0.019		1.91	1.92		ug/L		100	70 - 130	6	20
beta-BHC	<0.096		1.91	2.22		ug/L		116	70 - 130	8	20
Bis(2-ethylhexyl) phthalate	<0.58		1.91	1.55		ug/L		81	70 - 130	4	20
Bromacil	<0.096	F1	1.91	2.97	F1	ug/L		156	70 - 130	9	20
Butachlor	<0.048	F1	1.91	2.62	F1	ug/L		137	70 - 130	2	20
Butylbenzylphthalate	<0.48	F1	1.91	2.58	F1	ug/L		135	70 - 130	3	20
Chlorobenzilate	<0.096	F1	1.91	2.52	F1	ug/L		132	70 - 130	2	20
Chloroneb	<0.096		1.91	1.82		ug/L		95	70 - 130	4	20
Chlorothalonil (Draconil, Bravo)	<0.096		1.91	2.09		ug/L		110	70 - 130	1	20
Chlorpyrifos	<0.048		1.91	2.25		ug/L		118	70 - 130	1	20
Chrysene	<0.019		1.91	1.93		ug/L		101	70 - 130	1	20
delta-BHC	<0.096		1.91	2.17		ug/L		113	70 - 130	10	20
Di(2-ethylhexyl)adipate	<0.58		1.91	1.66		ug/L		87	70 - 130	5	20
Dibenz(a,h)anthracene	<0.048		1.91	1.69		ug/L		88	70 - 130	8	20
Diclorvos (DDVP)	<0.048		1.91	2.33		ug/L		122	70 - 130	2	20
Dieldrin	<0.0096		1.91	2.25		ug/L		118	70 - 130	3	20
Diethylphthalate	<0.48		1.91	2.20		ug/L		112	70 - 130	3	20
Dimethylphthalate	<0.48		1.91	2.14		ug/L		112	70 - 130	2	20
Di-n-butyl phthalate	<0.96	F1	3.82	34.9	E F1	ug/L		913	70 - 130	0	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-164742-B-2-C MSD

Matrix: Water

Analysis Batch: 167693

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 167479

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate	<0.096	F1	1.91	1.30	F1	ug/L		68	70 - 130	12	20
Endosulfan I (Alpha)	<0.096		1.91	2.22		ug/L		116	70 - 130	4	20
Endosulfan II (Beta)	<0.096		1.91	2.41		ug/L		126	70 - 130	1	20
Endosulfan sulfate	<0.096		1.91	2.22		ug/L		116	70 - 130	4	20
Endrin	<0.0096		1.91	2.48		ug/L		130	70 - 130	0	20
Endrin aldehyde	<0.096	F1	1.91	0.290	F1	ug/L		15	60 - 130	4	20
EPTC	<0.096		1.91	2.04		ug/L		107	70 - 130	1	20
Fluoranthene	<0.096		1.91	2.22		ug/L		116	70 - 130	1	20
Fluorene	<0.048		1.91	2.00		ug/L		105	70 - 130	1	20
gamma-Chlordane	<0.048		1.91	1.74		ug/L		91	70 - 130	4	20
Heptachlor	<0.0096		1.91	2.12		ug/L		111	70 - 130	2	20
Heptachlor epoxide (isomer B)	<0.0096		1.91	2.24		ug/L		117	70 - 130	1	20
Hexachlorobenzene	<0.048		1.91	1.79		ug/L		94	70 - 130	2	20
Hexachlorocyclopentadiene	<0.048		1.91	2.31		ug/L		121	70 - 130	3	20
Indeno[1,2,3-cd]pyrene	<0.048		1.91	1.81		ug/L		95	70 - 130	8	20
Isophorone	<0.096		1.91	1.96		ug/L		101	70 - 130	4	20
Lindane	<0.0096		1.91	1.99		ug/L		104	70 - 130	4	20
Malathion	<0.096		1.91	2.34		ug/L		122	70 - 130	3	20
Methoxychlor	<0.048		1.91	2.47		ug/L		129	70 - 130	5	20
Metolachlor	<0.048		1.91	2.34		ug/L		122	70 - 130	1	20
Molinate	<0.096		1.91	2.05		ug/L		107	70 - 130	3	20
Naphthalene	<0.096		1.91	1.74		ug/L		91	70 - 130	1	20
Parathion	<0.096		1.91	2.44		ug/L		128	70 - 130	0	20
Pendimethalin (Penoxaline)	<0.096	F1	1.91	2.72	F1	ug/L		143	70 - 130	3	20
Phenanthrene	<0.038		1.91	1.94		ug/L		101	70 - 130	2	20
Propachlor	<0.048		1.91	2.24		ug/L		117	70 - 130	5	20
Pyrene	<0.048		1.91	2.31		ug/L		121	70 - 130	1	20
Simazine	<0.048		1.91	1.97		ug/L		103	70 - 130	2	20
Terbacil	<0.096	F1	1.91	2.71	F1	ug/L		142	70 - 130	7	20
Terbutylazine	<0.096		1.91	2.01		ug/L		105	70 - 130	1	20
Thiobencarb	<0.096		1.91	2.08		ug/L		109	70 - 130	0	20
trans-Nonachlor	<0.048		1.91	1.69		ug/L		89	70 - 130	2	20
Trifluralin	<0.096		1.91	2.33		ug/L		122	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	127		70 - 130

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

Lab Sample ID: MB 570-609628/1-A

Matrix: Water

Analysis Batch: 611489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 609628

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	08/11/25 05:56	08/14/25 10:56	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-609628/1-A

Matrix: Water

Analysis Batch: 611489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 609628

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	88		33 - 139	08/11/25 05:56	08/14/25 10:56	1
2-Fluorobiphenyl (Surr)	86		33 - 126	08/11/25 05:56	08/14/25 10:56	1
2-Fluorophenol (Surr)	55		12 - 120	08/11/25 05:56	08/14/25 10:56	1
Nitrobenzene-d5 (Surr)	96		36 - 120	08/11/25 05:56	08/14/25 10:56	1
Phenol-d6 (Surr)	32		10 - 120	08/11/25 05:56	08/14/25 10:56	1
p-Terphenyl-d14 (Surr)	101		47 - 131	08/11/25 05:56	08/14/25 10:56	1

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

Lab Sample ID: MB 570-612596/5

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
GRO (C6-C10)	<10		10	ug/L			08/16/25 12:35	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	80		38 - 134		08/16/25 12:35	1		

Lab Sample ID: LCS 570-612596/3

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (C4-C13)			400	346		ug/L		86	78 - 120		

Lab Sample ID: LCSD 570-612596/4

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (C4-C13)			400	330		ug/L		83	78 - 120	5	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	91		38 - 134								

Lab Sample ID: MRL 570-612596/6

Matrix: Water

Analysis Batch: 612596

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	<7.9		ug/L		75	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 570-612596/6

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	83		38 - 134

Lab Sample ID: 380-164502-C-1 MS

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Matrix Spike

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (C4-C13)	<10		400	346		ug/L		86	68 - 122	
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)	92		38 - 134							

Lab Sample ID: 380-164502-C-1 MSD

Matrix: Water

Analysis Batch: 612596

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	<10		400	309		ug/L		77	68 - 122	11	18
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	91		38 - 134								

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

Lab Sample ID: MB 570-609844/1-A

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 609844

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Diesel Range Organics (C10-C24)	<25		25	ug/L		08/11/25 11:43	08/16/25 05:38	1		
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		08/11/25 11:43	08/16/25 05:38	1		
C8-C18	<25		25	ug/L		08/11/25 11:43	08/16/25 05:38	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
n-Octacosane (Surr)	109		60 - 130			08/11/25 11:43	08/16/25 05:38	1		

Lab Sample ID: LCS 570-609844/2-A

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 609844

		Spike	LCS	LCS				%Rec	
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	
C10-C28		1600	1500		ug/L		94	56 - 127	
Surrogate	%Recovery	Qualifier	Limits						
n-Octacosane (Surr)	111		60 - 130						

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 570-609844/3-A

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 609844

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			1600	1500		ug/L		94	56 - 127	0	23
Surrogate		LCSD %Recovery	LCSD Qualifier	Limits							
n-Octacosane (Surr)		111		60 - 130							

Lab Sample ID: MRL 570-609844/4-A

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 609844

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			0.0200	0.0251		mg/L		125	50 - 150		
Surrogate		MRL %Recovery	MRL Qualifier	Limits							
n-Octacosane (Surr)		113		60 - 130							

Lab Sample ID: 380-164502-B-1-A MS

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 609844

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<25		1620	1580		ug/L		98	70 - 130		
Surrogate		MS %Recovery	MS Qualifier	Limits							
n-Octacosane (Surr)		117		60 - 130							

Lab Sample ID: 380-164502-B-1-B MSD

Matrix: Water

Analysis Batch: 612481

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 609844

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<25		1630	1650		ug/L		101	70 - 130	4	20
Surrogate		MSD %Recovery	MSD Qualifier	Limits							
n-Octacosane (Surr)		121		60 - 130							

QC Association Summary

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 167479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	525.2	
MB 380-167479/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-167479/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-167479/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-164742-B-2-B MS	Matrix Spike	Total/NA	Water	525.2	
380-164742-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

Analysis Batch: 167693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	525.2	167479
MB 380-167479/21-A	Method Blank	Total/NA	Water	525.2	167479
LCS 380-167479/23-A	Lab Control Sample	Total/NA	Water	525.2	167479
MRL 380-167479/22-A	Lab Control Sample	Total/NA	Water	525.2	167479
380-164742-B-2-B MS	Matrix Spike	Total/NA	Water	525.2	167479
380-164742-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	167479

Prep Batch: 609628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1	
MB 570-609628/1-A	Method Blank	Total/NA	Water	625.1	

Analysis Batch: 611489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-609628/1-A	Method Blank	Total/NA	Water	625.1	609628

Analysis Batch: 611998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1 SIM	609628

Analysis Batch: 614281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	625.1	609628

GC VOA

Analysis Batch: 612596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
380-164862-2	TB: Halawa Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-612596/5	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-612596/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-612596/4	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-612596/6	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-164502-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-164502-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 609844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	3510C	
MB 570-609844/1-A	Method Blank	Total/NA	Water	3510C	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC Semi VOA (Continued)

Prep Batch: 609844 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 570-609844/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-609844/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-609844/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-164502-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-164502-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 612481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-164862-1	Halawa Shaft Viewing Pool	Total/NA	Water	8015B	609844
MB 570-609844/1-A	Method Blank	Total/NA	Water	8015B	609844
LCS 570-609844/2-A	Lab Control Sample	Total/NA	Water	8015B	609844
LCSD 570-609844/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	609844
MRL 570-609844/4-A	Lab Control Sample	Total/NA	Water	8015B	609844
380-164502-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	609844
380-164502-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	609844

Lab Chronicle

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

Job ID: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-1

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			167479	X5FS	EA POM	08/08/25 09:36
Total/NA	Analysis	525.2		1	167693	Q8LA	EA POM	08/10/25 12:28
Total/NA	Prep	625.1			609628	H1SH	EET CAL 4	08/11/25 05:56
Total/NA	Analysis	625.1		1	614281	AX7Z	EET CAL 4	08/20/25 18:23
Total/NA	Prep	625.1			609628	H1SH	EET CAL 4	08/11/25 05:56
Total/NA	Analysis	625.1 SIM		1	611998	PQS1	EET CAL 4	08/15/25 15:05
Total/NA	Analysis	8015B GRO LL		1	612596	W4LC	EET CAL 4	08/16/25 17:28
Total/NA	Prep	3510C			609844	TVD6	EET CAL 4	08/11/25 11:43
Total/NA	Analysis	8015B		1	612481	H6FE	EET CAL 4	08/16/25 09:55

Client Sample ID: TB: Halawa Shaft Viewing Pool

Lab Sample ID: 380-164862-2

Date Collected: 08/05/25 09:30

Matrix: Water

Date Received: 08/07/25 09:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	612596	W4LC	EET CAL 4	08/16/25 22:21

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: 380-164862-1
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: 380-164862-1
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: 380-164862-1
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: 380-164862-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-164862-1	Halawa Shaft Viewing Pool	Water	08/05/25 09:30	08/07/25 09:34	Hawaii
380-164862-2	TB: Halawa Shaft Viewing Pool	Water	08/05/25 09:30	08/07/25 09:34	Hawaii

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

Environment Testing

[illegible]



Enviro

Loc: 380
164862

[illegible]

QFG3

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-164862-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 164862

List Number: 1

Creator: Hernandez, Orlando

List Source: Eurofins Eaton Analytical Pomona

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-164862-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 164862

List Source: Eurofins Calscience

List Number: 2

List Creation: 08/08/25 04:01 PM

Creator: Judkins, Julianne

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2/2.5 SC11
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	