

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-170942-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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Definitions/Glossary

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

Job ID: 380-170942-1
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 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: 380-170942-1

Job ID: 380-170942-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-170942-1

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 9/11/2025 9:47 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 5.8°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

Method 8015B_DRO_LL_CS: The method reporting limit check (MRL) for preparation batch 570-625548 and analytical batch 570-626815 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.

Detection Summary

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

No Detections.

Client Sample ID: TB: HALAWA Shaft Viewing Pool

Lab Sample ID: 380-170942-2

No Detections.

- 1
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This Detection Summary does not include radiochemical test results.

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Client Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

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		09/14/25 08:53	09/15/25 14:01	1
2,4'-DDD	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
2,4'-DDE	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
2,4'-DDT	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
2-Methylnaphthalene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
4,4'-DDD	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
4,4'-DDE	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
4,4'-DDT	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Acenaphthene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Acenaphthylene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Acetochlor	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Alachlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
alpha-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
alpha-Chlordane	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Anthracene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 14:01	1
Atrazine	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Benz(a)anthracene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Benzo[a]pyrene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 14:01	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 14:01	1
Benzo[g,h,i]perylene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 14:01	1
beta-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		09/14/25 08:53	09/15/25 14:01	1
Bromacil	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Butachlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Butylbenzylphthalate	<0.48		0.48	ug/L		09/14/25 08:53	09/15/25 14:01	1
Chlorobenzilate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Chloroneb	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Chlorpyrifos	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Chrysene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 14:01	1
delta-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		09/14/25 08:53	09/15/25 14:01	1
Dibenz(a,h)anthracene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Diclorvos (DDVP)	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Dieldrin	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Diethylphthalate	<0.48		0.48	ug/L		09/14/25 08:53	09/15/25 14:01	1
Dimethylphthalate	<0.48		0.48	ug/L		09/14/25 08:53	09/15/25 14:01	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		09/14/25 08:53	09/15/25 14:01	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Endosulfan sulfate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Endrin	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Endrin aldehyde	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
EPTC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Fluoranthene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1

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Client Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

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		09/14/25 08:53	09/15/25 14:01	1
gamma-Chlordane	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Heptachlor	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Hexachlorobenzene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Hexachlorocyclopentadiene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Isophorone	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Lindane	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Malathion	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Methoxychlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Metolachlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Molinate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Naphthalene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Parathion	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Phenanthrene	<0.039		0.039	ug/L		09/14/25 08:53	09/15/25 14:01	1
Propachlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Pyrene	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Simazine	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Terbacil	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Terbutylazine	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Thiobencarb	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		09/14/25 08:53	09/15/25 14:01	1
trans-Nonachlor	<0.048		0.048	ug/L		09/14/25 08:53	09/15/25 14:01	1
Trifluralin	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 14:01	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	09/14/25 08:53	09/15/25 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	102		70 - 130	09/14/25 08:53	09/15/25 14:01	1
Perylene-d12	90		70 - 130	09/14/25 08:53	09/15/25 14:01	1
Triphenylphosphate	100		70 - 130	09/14/25 08:53	09/15/25 14:01	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		09/15/25 04:33	09/17/25 22:04	1
2-Methylnaphthalene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Acenaphthene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Acenaphthylene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Anthracene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Benzo[a]anthracene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Benzo[a]pyrene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Chrysene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Fluoranthene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

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		09/15/25 04:33	09/17/25 22:04	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Naphthalene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Phenanthrene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1
Pyrene	<0.19		0.19	ug/L		09/15/25 04:33	09/17/25 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	83		28 - 127	09/15/25 04:33	09/17/25 22:04	1
2-Fluorobiphenyl (Surr)	78		31 - 120	09/15/25 04:33	09/17/25 22:04	1
2-Fluorophenol (Surr)	45		17 - 120	09/15/25 04:33	09/17/25 22:04	1
Nitrobenzene-d5 (Surr)	74		27 - 120	09/15/25 04:33	09/17/25 22:04	1
Phenol-d6 (Surr)	24		10 - 120	09/15/25 04:33	09/17/25 22:04	1
p-Terphenyl-d14 (Surr)	77		45 - 120	09/15/25 04:33	09/17/25 22:04	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	09/15/25 04:33	09/22/25 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	72		33 - 139	09/15/25 04:33	09/22/25 13:52	1
2-Fluorobiphenyl (Surr)	81		33 - 126	09/15/25 04:33	09/22/25 13:52	1
2-Fluorophenol (Surr)	47		12 - 120	09/15/25 04:33	09/22/25 13:52	1
Nitrobenzene-d5 (Surr)	82		36 - 120	09/15/25 04:33	09/22/25 13:52	1
Phenol-d6 (Surr)	27		10 - 120	09/15/25 04:33	09/22/25 13:52	1
p-Terphenyl-d14 (Surr)	84		47 - 131	09/15/25 04:33	09/22/25 13:52	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			09/17/25 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		38 - 134		09/17/25 12:52	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		09/15/25 09:17	09/17/25 16:56	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/15/25 09:17	09/17/25 16:56	1
C8-C18	<25		25	ug/L		09/15/25 09:17	09/17/25 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	106		60 - 130	09/15/25 09:17	09/17/25 16:56	1

Client Sample ID: TB: HALAWA Shaft Viewing Pool

Lab Sample ID: 380-170942-2

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

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			09/17/25 12:12	1

Client Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: HALAWA Shaft Viewing Pool

Lab Sample ID: 380-170942-2

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
4-Bromofluorobenzene (Surr)	93		38 - 134		09/17/25 12:12	1

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- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16

Action Limit Summary

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0097		ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0097		ug/L	0.2	0.0097	525.2	Total/NA
Methoxychlor	<0.048		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: 380-170942-1
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)
380-170873-D-1-A DU	Duplicate	101	94	101
380-170942-1	HALAWA SHAFT Viewing Pool	102	90	100
380-171070-B-1-A MS	Matrix Spike	100	96	102
LCS 380-174008/22-A	Lab Control Sample	102	97	105
MB 380-174008/20-A	Method Blank	103	90	100
MRL 380-174008/21-A	Lab Control Sample	102	91	102

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)
380-170942-1	HALAWA SHAFT Viewing Pool	72	81	47	82	27	84
MB 570-625449/1-A	Method Blank	68	67	49	70	28	73

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)
380-170493-A-1-A MS	Matrix Spike	80	78	55	64	35	78
380-170493-A-1-B MSD	Matrix Spike Duplicate	71	73	52	61	33	71
380-170942-1	HALAWA SHAFT Viewing Pool	83	78	45	74	24	77
LCS 570-625449/2-A	Lab Control Sample	66	66	48	56	31	68
LCSD 570-625449/3-A	Lab Control Sample Dup	78	79	57	66	37	77
MB 570-625449/1-A	Method Blank	75	69	47	67	29	73

Surrogate Legend

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

Surrogate Summary

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
380-170942-1	HALAWA SHAFT Viewing Pool	90
380-170942-2	TB: HALAWA Shaft Viewing Pool	93
570-246170-C-4 MS	Matrix Spike	96
570-246170-E-4 MSD	Matrix Spike Duplicate	97
LCS 570-626677/4	Lab Control Sample	92
LCSD 570 626677/5	Lab Control Sample Dup	89
MB 570-626677/6	Method Blank	89
MRL 570-626677/3	Lab Control Sample	90

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)
380-170493-C-1-A MS	Matrix Spike	105
380-170493-C-1-B MSD	Matrix Spike Duplicate	108
380-170942-1	HALAWA SHAFT Viewing Pool	106
LCS 570-625548/2-A	Lab Control Sample	104
LCSD 570-625548/3-A	Lab Control Sample Dup	97
MB 570-625548/1-A	Method Blank	96
MRL 570-625548/4-A	Lab Control Sample	93

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-170942-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-174008/20-A
Matrix: Water
Analysis Batch: 174128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174008

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2,4'-DDD	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2,4'-DDE	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2,4'-DDT	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
2-Methylnaphthalene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
4,4'-DDD	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
4,4'-DDE	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
4,4'-DDT	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Acenaphthene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Acenaphthylene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Acetochlor	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Alachlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
alpha-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
alpha-Chlordane	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Anthracene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 13:00	1
Atrazine	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Benz(a)anthracene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Benzo[a]pyrene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 13:00	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 13:00	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 13:00	1
beta-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		09/14/25 08:53	09/15/25 13:00	1
Bromacil	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Butachlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Butylbenzylphthalate	<0.49		0.49	ug/L		09/14/25 08:53	09/15/25 13:00	1
Chlorobenzilate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Chloroneb	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Chlorpyrifos	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Chrysene	<0.019		0.019	ug/L		09/14/25 08:53	09/15/25 13:00	1
delta-BHC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		09/14/25 08:53	09/15/25 13:00	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Dieldrin	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Diethylphthalate	<0.49		0.49	ug/L		09/14/25 08:53	09/15/25 13:00	1
Dimethylphthalate	<0.49		0.49	ug/L		09/14/25 08:53	09/15/25 13:00	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		09/14/25 08:53	09/15/25 13:00	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Endosulfan sulfate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Endrin	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Endrin aldehyde	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
EPTC	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-174008/20-A
Matrix: Water
Analysis Batch: 174128

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 174008

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Fluorene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
gamma-Chlordane	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Heptachlor	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Hexachlorobenzene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Isophorone	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Lindane	<0.0097		0.0097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Malathion	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Methoxychlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Metolachlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Molinate	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Naphthalene	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Parathion	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Phenanthrene	<0.039		0.039	ug/L		09/14/25 08:53	09/15/25 13:00	1
Propachlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Pyrene	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Simazine	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Terbacil	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Terbutylazine	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Thiobencarb	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		09/14/25 08:53	09/15/25 13:00	1
trans-Nonachlor	<0.049		0.049	ug/L		09/14/25 08:53	09/15/25 13:00	1
Trifluralin	<0.097		0.097	ug/L		09/14/25 08:53	09/15/25 13:00	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Decane	2.45	T J N	ug/L		2.69	124-18-5	09/14/25 08:53	09/15/25 13:00	1
Unknown	0.599	T J	ug/L		3.78	N/A	09/14/25 08:53	09/15/25 13:00	1
9-Octadecenamamide, (Z)-	0.757	T J N	ug/L		7.74	301-02-0	09/14/25 08:53	09/15/25 13:00	1
13-Docosenamamide, (Z)-	0.567	T J N	ug/L		10.23	112-84-5	09/14/25 08:53	09/15/25 13:00	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	103		70 - 130	09/14/25 08:53	09/15/25 13:00	1
Perylene-d12	90		70 - 130	09/14/25 08:53	09/15/25 13:00	1
Triphenylphosphate	100		70 - 130	09/14/25 08:53	09/15/25 13:00	1

Lab Sample ID: LCS 380-174008/22-A
Matrix: Water
Analysis Batch: 174128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 174008

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	1.94	1.81		ug/L		93	70 - 130
2,4'-DDD	1.94	2.03		ug/L		104	70 - 130
2,4'-DDE	1.94	2.03		ug/L		105	70 - 130
2,4'-DDT	1.94	1.96		ug/L		101	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-174008/22-A

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1.94	2.07		ug/L		106	70 - 130
2,6-Dinitrotoluene	1.94	2.03		ug/L		104	70 - 130
2-Methylnaphthalene	1.94	1.98		ug/L		102	70 - 130
4,4'-DDD	1.94	2.19		ug/L		113	70 - 130
4,4'-DDE	1.94	2.04		ug/L		105	70 - 130
4,4'-DDT	1.94	2.04		ug/L		105	70 - 130
Acenaphthene	1.94	2.02		ug/L		104	70 - 130
Acenaphthylene	1.94	2.03		ug/L		104	70 - 130
Acetochlor	1.94	2.16		ug/L		111	70 - 130
Alachlor	1.94	2.20		ug/L		113	70 - 130
alpha-BHC	1.94	2.00		ug/L		103	70 - 130
alpha-Chlordane	1.94	2.14		ug/L		110	70 - 130
Anthracene	1.94	2.05		ug/L		105	70 - 130
Atrazine	1.94	2.11		ug/L		109	70 - 130
Benz(a)anthracene	1.94	2.01		ug/L		103	70 - 130
Benzo[a]pyrene	1.94	2.00		ug/L		103	70 - 130
Benzo[b]fluoranthene	1.94	2.02		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.94	1.97		ug/L		101	70 - 130
Benzo[k]fluoranthene	1.94	2.01		ug/L		103	70 - 130
beta-BHC	1.94	2.06		ug/L		106	70 - 130
Bis(2-ethylhexyl) phthalate	1.94	2.02		ug/L		104	70 - 130
Bromacil	1.94	2.10		ug/L		108	70 - 130
Butachlor	1.94	2.13		ug/L		110	70 - 130
Butylbenzylphthalate	1.94	2.19		ug/L		113	70 - 130
Chlorobenzilate	1.94	2.11		ug/L		109	70 - 130
Chloroneb	1.94	2.02		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.94	1.95		ug/L		100	70 - 130
Chlorpyrifos	1.94	2.14		ug/L		110	70 - 130
Chrysene	1.94	1.97		ug/L		101	70 - 130
delta-BHC	1.94	2.07		ug/L		107	70 - 130
Di(2-ethylhexyl)adipate	1.94	2.15		ug/L		111	70 - 130
Dibenz(a,h)anthracene	1.94	1.91		ug/L		98	70 - 130
Diclorvos (DDVP)	1.94	2.27		ug/L		117	70 - 130
Dieldrin	1.94	2.09		ug/L		107	70 - 130
Diethylphthalate	1.94	2.15		ug/L		111	70 - 130
Dimethylphthalate	1.94	2.13		ug/L		109	70 - 130
Di-n-butyl phthalate	3.89	4.45		ug/L		115	70 - 130
Di-n-octyl phthalate	1.94	2.01		ug/L		104	70 - 130
Endosulfan I (Alpha)	1.94	1.98		ug/L		102	70 - 130
Endosulfan II (Beta)	1.94	1.98		ug/L		102	70 - 130
Endosulfan sulfate	1.94	1.92		ug/L		99	70 - 130
Endrin	1.94	2.27		ug/L		117	70 - 130
Endrin aldehyde	1.94	1.98		ug/L		102	60 - 130
EPTC	1.94	2.11		ug/L		109	70 - 130
Fluoranthene	1.94	2.14		ug/L		110	70 - 130
Fluorene	1.94	2.05		ug/L		106	70 - 130
gamma-Chlordane	1.94	2.08		ug/L		107	70 - 130
Heptachlor	1.94	2.19		ug/L		112	70 - 130
Heptachlor epoxide (isomer B)	1.94	2.14		ug/L		110	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-174008/22-A

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Hexachlorobenzene	1.94	1.95		ug/L		100	70 - 130
Hexachlorocyclopentadiene	1.94	2.16		ug/L		111	70 - 130
Indeno[1,2,3-cd]pyrene	1.94	2.01		ug/L		103	70 - 130
Isophorone	1.94	2.01		ug/L		103	70 - 130
Lindane	1.94	2.04		ug/L		105	70 - 130
Malathion	1.94	2.06		ug/L		106	70 - 130
Methoxychlor	1.94	2.16		ug/L		111	70 - 130
Metolachlor	1.94	2.12		ug/L		109	70 - 130
Molinate	1.94	2.13		ug/L		109	70 - 130
Naphthalene	1.94	2.23		ug/L		114	70 - 130
Parathion	1.94	2.14		ug/L		110	70 - 130
Pendimethalin (Penoxaline)	1.94	2.04		ug/L		105	70 - 130
Phenanthrene	1.94	2.01		ug/L		104	70 - 130
Propachlor	1.94	2.19		ug/L		113	70 - 130
Pyrene	1.94	2.15		ug/L		110	70 - 130
Simazine	1.94	2.34		ug/L		120	70 - 130
Terbacil	1.94	2.11		ug/L		109	70 - 130
Terbutylazine	1.94	2.19		ug/L		112	70 - 130
Thiobencarb	1.94	2.22		ug/L		114	70 - 130
trans-Nonachlor	1.94	2.07		ug/L		107	70 - 130
Trifluralin	1.94	1.98		ug/L		102	70 - 130

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	102		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	105		70 - 130

Lab Sample ID: MRL 380-174008/21-A

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	0.0974	0.106		ug/L		109	50 - 150
2,4'-DDD	0.0974	0.0823	J	ug/L		84	50 - 150
2,4'-DDE	0.0974	0.0929	J	ug/L		95	50 - 150
2,4'-DDT	0.0974	0.107		ug/L		109	50 - 150
2,4-Dinitrotoluene	0.0974	0.123		ug/L		126	50 - 150
2,6-Dinitrotoluene	0.0974	0.132		ug/L		136	50 - 150
2-Methylnaphthalene	0.0974	0.105		ug/L		108	50 - 150
4,4'-DDD	0.0974	0.0943	J	ug/L		97	50 - 150
4,4'-DDE	0.0974	0.0873	J	ug/L		90	50 - 150
4,4'-DDT	0.0974	0.117		ug/L		120	50 - 150
Acenaphthene	0.0974	0.0979		ug/L		100	50 - 150
Acenaphthylene	0.0974	0.0924	J	ug/L		95	50 - 150
Acetochlor	0.0974	0.107		ug/L		110	50 - 150
Alachlor	0.0487	0.0549		ug/L		113	50 - 150
alpha-BHC	0.0974	0.0960	J	ug/L		99	50 - 150
alpha-Chlordane	0.0244	<0.028		ug/L		95	50 - 150

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-174008/21-A

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Anthracene	0.0195	0.0225		ug/L		115	50 - 150
Atrazine	0.0487	0.0589		ug/L		121	50 - 150
Benz(a)anthracene	0.0487	0.0498		ug/L		102	50 - 150
Benzo[a]pyrene	0.0195	0.0211		ug/L		108	50 - 150
Benzo[b]fluoranthene	0.0195	0.0214		ug/L		110	50 - 150
Benzo[g,h,i]perylene	0.0487	0.0436	J	ug/L		90	50 - 150
Benzo[k]fluoranthene	0.0195	0.0242		ug/L		124	50 - 150
beta-BHC	0.0974	0.101		ug/L		104	50 - 150
Bis(2-ethylhexyl) phthalate	0.585	0.614		ug/L		105	50 - 150
Bromacil	0.0974	0.128		ug/L		131	50 - 150
Butachlor	0.0487	0.0575		ug/L		118	50 - 150
Butylbenzylphthalate	0.487	0.559		ug/L		115	50 - 150
Chlorobenzilate	0.0974	0.117		ug/L		120	50 - 150
Chloroneb	0.0974	0.0974		ug/L		100	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0974	0.0990		ug/L		102	50 - 150
Chlorpyrifos	0.0487	0.0488	J	ug/L		100	50 - 150
Chrysene	0.0195	0.0196		ug/L		101	50 - 150
delta-BHC	0.0974	0.0999		ug/L		103	50 - 150
Di(2-ethylhexyl)adipate	0.585	0.656		ug/L		112	50 - 150
Dibenz(a,h)anthracene	0.0487	0.0500		ug/L		103	50 - 150
Diclorvos (DDVP)	0.0487	0.0638		ug/L		131	50 - 150
Dieldrin	0.00974	0.0130		ug/L		133	50 - 150
Diethylphthalate	0.487	0.526		ug/L		108	50 - 150
Dimethylphthalate	0.487	0.520		ug/L		107	50 - 150
Di-n-butyl phthalate	0.487	0.688	J	ug/L		141	49 - 243
Di-n-octyl phthalate	0.0974	0.103		ug/L		106	50 - 150
Endosulfan I (Alpha)	0.0974	0.0864	J	ug/L		89	50 - 150
Endosulfan II (Beta)	0.0974	0.0946	J	ug/L		97	50 - 150
Endosulfan sulfate	0.0974	0.105		ug/L		108	50 - 150
Endrin	0.00974	0.0102		ug/L		105	50 - 150
Endrin aldehyde	0.0974	0.109		ug/L		112	50 - 150
EPTC	0.0974	0.101		ug/L		104	50 - 150
Fluoranthene	0.0974	0.0936	J	ug/L		96	50 - 150
Fluorene	0.0487	<0.049		ug/L		99	50 - 150
gamma-Chlordane	0.0244	0.0228	J	ug/L		94	50 - 150
Heptachlor	0.00974	0.0108		ug/L		111	50 - 150
Heptachlor epoxide (isomer B)	0.00974	0.0115		ug/L		118	50 - 150
Hexachlorobenzene	0.0487	0.0448	J	ug/L		92	50 - 150
Hexachlorocyclopentadiene	0.0487	0.0590		ug/L		121	50 - 150
Indeno[1,2,3-cd]pyrene	0.0487	0.0525		ug/L		108	50 - 150
Isophorone	0.0974	0.118		ug/L		121	50 - 150
Lindane	0.00974	0.0105		ug/L		107	50 - 150
Malathion	0.0974	0.114		ug/L		117	50 - 150
Methoxychlor	0.0487	0.0569		ug/L		117	50 - 150
Metolachlor	0.0487	0.0574		ug/L		118	50 - 150
Molinate	0.0974	0.105		ug/L		107	50 - 150
Naphthalene	0.0974	0.0943	J	ug/L		97	50 - 150
Parathion	0.0974	0.102		ug/L		105	50 - 150
Pendimethalin (Penoxaline)	0.0974	0.107		ug/L		110	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-174008/21-A

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Phenanthrene	0.0390	0.0418		ug/L		107	50 - 150
Propachlor	0.0487	0.0537		ug/L		110	50 - 150
Pyrene	0.0487	0.0457	J	ug/L		94	50 - 150
Simazine	0.0487	0.0459	J	ug/L		94	50 - 150
Terbacil	0.0974	0.120		ug/L		123	50 - 150
Terbutylazine	0.0974	0.0952	J	ug/L		98	50 - 150
Thiobencarb	0.0974	0.0984		ug/L		101	50 - 150
trans-Nonachlor	0.0244	<0.025		ug/L		97	50 - 150
Trifluralin	0.0974	0.108		ug/L		111	50 - 150

Surrogate	MRL	MRL	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	102		70 - 130
Perylene-d12	91		70 - 130
Triphenylphosphate	102		70 - 130

Lab Sample ID: 380-171070-B-1-A MS

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.097		1.93	1.79		ug/L		92	70 - 130
2,4'-DDD	<0.097		1.93	2.00		ug/L		104	70 - 130
2,4'-DDE	<0.097		1.93	2.02		ug/L		105	70 - 130
2,4'-DDT	<0.097		1.93	1.95		ug/L		100	70 - 130
2,4-Dinitrotoluene	<0.097		1.93	2.09		ug/L		108	70 - 130
2,6-Dinitrotoluene	<0.097		1.93	2.05		ug/L		106	70 - 130
2-Methylnaphthalene	<0.097		1.93	1.95		ug/L		101	70 - 130
4,4'-DDD	<0.097		1.93	2.13		ug/L		111	70 - 130
4,4'-DDE	<0.097		1.93	2.01		ug/L		104	70 - 130
4,4'-DDT	<0.097		1.93	2.01		ug/L		104	70 - 130
Acenaphthene	<0.097		1.93	2.00		ug/L		104	70 - 130
Acenaphthylene	<0.097		1.93	2.01		ug/L		104	70 - 130
Acetochlor	<0.097		1.93	2.16		ug/L		112	70 - 130
Alachlor	<0.048		1.93	2.18		ug/L		113	70 - 130
alpha-BHC	<0.097		1.93	1.96		ug/L		101	70 - 130
alpha-Chlordane	<0.048		1.93	2.11		ug/L		110	70 - 130
Anthracene	<0.019		1.93	1.37		ug/L		71	70 - 130
Atrazine	<0.048		1.93	2.03		ug/L		105	70 - 130
Benz(a)anthracene	<0.048		1.93	1.86		ug/L		96	70 - 130
Benzo[a]pyrene	<0.019		1.93	1.70		ug/L		88	70 - 130
Benzo[b]fluoranthene	<0.019		1.93	2.01		ug/L		104	70 - 130
Benzo[g,h,i]perylene	<0.048		1.93	1.93		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.019		1.93	1.89		ug/L		98	70 - 130
beta-BHC	<0.097		1.93	2.02		ug/L		105	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.93	2.05		ug/L		106	70 - 130
Bromacil	<0.097		1.93	2.16		ug/L		112	70 - 130
Butachlor	<0.048		1.93	2.11		ug/L		109	70 - 130
Butylbenzylphthalate	<0.48		1.93	2.14		ug/L		111	70 - 130

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-171070-B-1-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 174128

Prep Batch: 174008

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chlorobenzilate	<0.097		1.93	2.07		ug/L		107	70 - 130
Chloroneb	<0.097		1.93	1.98		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.93	1.97		ug/L		102	70 - 130
Chlorpyrifos	<0.048		1.93	2.12		ug/L		110	70 - 130
Chrysene	<0.019		1.93	1.92		ug/L		100	70 - 130
delta-BHC	<0.097		1.93	2.03		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.93	2.14		ug/L		111	70 - 130
Dibenz(a,h)anthracene	<0.048		1.93	1.98		ug/L		103	70 - 130
Diclorvos (DDVP)	<0.048		1.93	2.32		ug/L		120	70 - 130
Dieldrin	<0.0097		1.93	2.09		ug/L		108	70 - 130
Diethylphthalate	<0.48		1.93	2.11		ug/L		109	70 - 130
Dimethylphthalate	<0.48		1.93	2.11		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.97		3.86	4.32		ug/L		112	70 - 130
Di-n-octyl phthalate	<0.097		1.93	2.03		ug/L		105	70 - 130
Endosulfan I (Alpha)	<0.097		1.93	1.98		ug/L		102	70 - 130
Endosulfan II (Beta)	<0.097		1.93	1.98		ug/L		103	70 - 130
Endosulfan sulfate	<0.097		1.93	1.92		ug/L		100	70 - 130
Endrin	<0.0097		1.93	2.22		ug/L		115	70 - 130
Endrin aldehyde	<0.097		1.93	1.70		ug/L		88	60 - 130
EPTC	<0.097		1.93	2.08		ug/L		108	70 - 130
Fluoranthene	<0.097		1.93	2.10		ug/L		109	70 - 130
Fluorene	<0.048		1.93	2.03		ug/L		105	70 - 130
gamma-Chlordane	<0.048		1.93	2.07		ug/L		107	70 - 130
Heptachlor	<0.0097		1.93	2.19		ug/L		113	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.93	2.05		ug/L		107	70 - 130
Hexachlorobenzene	<0.048		1.93	1.94		ug/L		101	70 - 130
Hexachlorocyclopentadiene	<0.048		1.93	2.14		ug/L		111	70 - 130
Indeno[1,2,3-cd]pyrene	<0.048		1.93	1.97		ug/L		102	70 - 130
Isophorone	<0.097		1.93	2.02		ug/L		105	70 - 130
Lindane	<0.0097		1.93	1.99		ug/L		103	70 - 130
Malathion	<0.097		1.93	2.05		ug/L		106	70 - 130
Methoxychlor	<0.048		1.93	2.11		ug/L		109	70 - 130
Metolachlor	<0.048		1.93	2.10		ug/L		109	70 - 130
Molinate	<0.097		1.93	2.10		ug/L		109	70 - 130
Naphthalene	<0.097		1.93	2.21		ug/L		115	70 - 130
Parathion	<0.097		1.93	2.11		ug/L		109	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.93	2.00		ug/L		104	70 - 130
Phenanthrene	<0.039		1.93	1.98		ug/L		103	70 - 130
Propachlor	<0.048		1.93	2.18		ug/L		113	70 - 130
Pyrene	<0.048		1.93	2.13		ug/L		110	70 - 130
Simazine	<0.048		1.93	2.25		ug/L		117	70 - 130
Terbacil	<0.097		1.93	2.11		ug/L		109	70 - 130
Terbutylazine	<0.097		1.93	2.15		ug/L		112	70 - 130
Thiobencarb	<0.097		1.93	2.19		ug/L		114	70 - 130
trans-Nonachlor	<0.048		1.93	2.07		ug/L		107	70 - 130
Trifluralin	<0.097		1.93	1.94		ug/L		101	70 - 130

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-171070-B-1-A MS
Matrix: Water
Analysis Batch: 174128

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 174008

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	96		70 - 130
Triphenylphosphate	102		70 - 130

Lab Sample ID: 380-170873-D-1-A DU
Matrix: Water
Analysis Batch: 174128

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 174008

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
1-Methylnaphthalene	<0.098		<0.10		ug/L		NC	20
2,4'-DDD	<0.098		<0.10		ug/L		NC	20
2,4'-DDE	<0.098		<0.10		ug/L		NC	20
2,4'-DDT	<0.098		<0.10		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.10		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.10		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.10		ug/L		NC	20
4,4'-DDD	<0.098		<0.10		ug/L		NC	20
4,4'-DDE	<0.098		<0.10		ug/L		NC	20
4,4'-DDT	<0.098		<0.10		ug/L		NC	20
Acenaphthene	<0.098		<0.10		ug/L		NC	20
Acenaphthylene	<0.098		<0.10		ug/L		NC	20
Acetochlor	<0.098		<0.10		ug/L		NC	20
Alachlor	<0.049		<0.050		ug/L		NC	20
alpha-BHC	<0.098		<0.10		ug/L		NC	20
alpha-Chlordane	<0.049		<0.050		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.050		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.050		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.050		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.098		<0.10		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.60		ug/L		NC	20
Bromacil	<0.098		<0.10		ug/L		NC	20
Butachlor	<0.049		<0.050		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.50		ug/L		NC	20
Chlorobenzilate	<0.098		<0.10		ug/L		NC	20
Chloroneb	<0.098		<0.10		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.10		ug/L		NC	20
Chlorpyrifos	<0.049		<0.050		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.098		<0.10		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.60		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.050		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.050		ug/L		NC	20
Dieldrin	<0.0098		<0.010		ug/L		NC	20
Diethylphthalate	<0.49		<0.50		ug/L		NC	20

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-170873-D-1-A DU

Matrix: Water

Analysis Batch: 174128

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 174008

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Dimethylphthalate	<0.49		<0.50		ug/L		NC	20
Di-n-butyl phthalate	<0.98		<1.0		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.10		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.10		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.10		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.10		ug/L		NC	20
Endrin	<0.0098		<0.010		ug/L		NC	20
Endrin aldehyde	<0.098		<0.10		ug/L		NC	20
EPTC	<0.098		<0.10		ug/L		NC	20
Fluoranthene	<0.098		<0.10		ug/L		NC	20
Fluorene	<0.049		<0.050		ug/L		NC	20
gamma-Chlordane	<0.049		<0.050		ug/L		NC	20
Heptachlor	<0.0098		<0.010		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0098		<0.010		ug/L		NC	20
Hexachlorobenzene	<0.049		<0.050		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.050		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049		<0.050		ug/L		NC	20
Isophorone	<0.098		<0.10		ug/L		NC	20
Lindane	<0.0098		<0.010		ug/L		NC	20
Malathion	<0.098		<0.10		ug/L		NC	20
Methoxychlor	<0.049		<0.050		ug/L		NC	20
Metolachlor	<0.049		<0.050		ug/L		NC	20
Molinate	<0.098		<0.10		ug/L		NC	20
Naphthalene	<0.098		<0.10		ug/L		NC	20
Parathion	<0.098		<0.10		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098		<0.10		ug/L		NC	20
Phenanthrene	<0.039		<0.040		ug/L		NC	20
Propachlor	<0.049		<0.050		ug/L		NC	20
Pyrene	<0.049		<0.050		ug/L		NC	20
Simazine	<0.049		<0.050		ug/L		NC	20
Terbacil	<0.098		<0.10		ug/L		NC	20
Terbutylazine	<0.098		<0.10		ug/L		NC	20
Thiobencarb	<0.098		<0.10		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.050		ug/L		NC	20
Trifluralin	<0.098		<0.10		ug/L		NC	20

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

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-625449/1-A
Matrix: Water
Analysis Batch: 628768

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625449

<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>Tentatively Identified Compound</i>	<i>None</i>		<i>ug/L</i>			<i>N/A</i>	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	<i>1</i>

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	68		33 - 139	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1
<i>2-Fluorobiphenyl (Surr)</i>	67		33 - 126	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1
<i>2-Fluorophenol (Surr)</i>	49		12 - 120	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1
<i>Nitrobenzene-d5 (Surr)</i>	70		36 - 120	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1
<i>Phenol-d6 (Surr)</i>	28		10 - 120	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1
<i>p-Terphenyl-d14 (Surr)</i>	73		47 - 131	<i>09/15/25 04:33</i>	<i>09/22/25 08:34</i>	1

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

Lab Sample ID: MB 570-625449/1-A
Matrix: Water
Analysis Batch: 626828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625449

<i>Analyte</i>	<i>Result</i>	<i>Qualifier</i>	<i>RL</i>	<i>Unit</i>	<i>D</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1-Methylnaphthalene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
2-Methylnaphthalene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Acenaphthene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Acenaphthylene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Anthracene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Benzo[a]anthracene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Benzo[a]pyrene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Chrysene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Fluoranthene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Fluorene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Naphthalene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Phenanthrene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1
Pyrene	<0.20		0.20	ug/L		09/15/25 04:33	09/17/25 17:41	1

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
<i>2,4,6-Tribromophenol (Surr)</i>	75		28 - 127	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1
<i>2-Fluorobiphenyl (Surr)</i>	69		31 - 120	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1
<i>2-Fluorophenol (Surr)</i>	47		17 - 120	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1
<i>Nitrobenzene-d5 (Surr)</i>	67		27 - 120	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1
<i>Phenol-d6 (Surr)</i>	29		10 - 120	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1
<i>p-Terphenyl-d14 (Surr)</i>	73		45 - 120	<i>09/15/25 04:33</i>	<i>09/17/25 17:41</i>	1

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-625449/2-A
Matrix: Water
Analysis Batch: 626828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
1-Methylnaphthalene	20.0	12.0		ug/L		60	47 - 120	
2-Methylnaphthalene	20.0	12.0		ug/L		60	43 - 120	
Acenaphthene	20.0	13.7		ug/L		69	60 - 132	
Acenaphthylene	20.0	14.0		ug/L		70	54 - 126	
Anthracene	20.0	14.2		ug/L		71	43 - 120	
Benzo[a]anthracene	20.0	14.0		ug/L		70	42 - 133	
Benzo[a]pyrene	20.0	14.7		ug/L		74	32 - 148	
Benzo[b]fluoranthene	20.0	13.9		ug/L		70	42 - 140	
Benzo[g,h,i]perylene	20.0	14.7		ug/L		73	1 - 195	
Benzo[k]fluoranthene	20.0	15.4		ug/L		77	25 - 146	
Chrysene	20.0	14.2		ug/L		71	44 - 140	
Dibenz(a,h)anthracene	20.0	14.5		ug/L		73	1 - 200	
Fluoranthene	20.0	14.1		ug/L		70	43 - 121	
Fluorene	20.0	14.2		ug/L		71	70 - 120	
Indeno[1,2,3-cd]pyrene	20.0	13.5		ug/L		67	1 - 151	
Naphthalene	20.0	11.7		ug/L		59	36 - 120	
Phenanthrene	20.0	13.5		ug/L		68	65 - 120	
Pyrene	20.0	14.0		ug/L		70	70 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	66		28 - 127
2-Fluorobiphenyl (Surr)	66		31 - 120
2-Fluorophenol (Surr)	48		17 - 120
Nitrobenzene-d5 (Surr)	56		27 - 120
Phenol-d6 (Surr)	31		10 - 120
p-Terphenyl-d14 (Surr)	68		45 - 120

Lab Sample ID: LCSD 570-625449/3-A
Matrix: Water
Analysis Batch: 626828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 625449

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits		RPD	Limit
1-Methylnaphthalene	20.0	14.3		ug/L		72	47 - 120	17	20	
2-Methylnaphthalene	20.0	14.1		ug/L		71	43 - 120	17	20	
Acenaphthene	20.0	16.8		ug/L		84	60 - 132	20	29	
Acenaphthylene	20.0	17.1		ug/L		85	54 - 126	20	45	
Anthracene	20.0	17.1		ug/L		85	43 - 120	19	40	
Benzo[a]anthracene	20.0	16.8		ug/L		84	42 - 133	18	32	
Benzo[a]pyrene	20.0	17.5		ug/L		87	32 - 148	17	43	
Benzo[b]fluoranthene	20.0	16.9		ug/L		85	42 - 140	20	43	
Benzo[g,h,i]perylene	20.0	17.6		ug/L		88	1 - 195	18	61	
Benzo[k]fluoranthene	20.0	17.6		ug/L		88	25 - 146	13	38	
Chrysene	20.0	17.2		ug/L		86	44 - 140	19	53	
Dibenz(a,h)anthracene	20.0	17.0		ug/L		85	1 - 200	16	75	
Fluoranthene	20.0	17.1		ug/L		86	43 - 121	20	40	
Fluorene	20.0	17.1		ug/L		86	70 - 120	19	23	
Indeno[1,2,3-cd]pyrene	20.0	16.0		ug/L		80	1 - 151	17	60	
Naphthalene	20.0	13.9		ug/L		69	36 - 120	16	39	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 570-625449/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 626828

Prep Batch: 625449

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Phenanthrene	20.0	16.4		ug/L		82	65 - 120	20	24	
Pyrene	20.0	17.1		ug/L		85	70 - 120	20	30	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	78		28 - 127
2-Fluorobiphenyl (Surr)	79		31 - 120
2-Fluorophenol (Surr)	57		17 - 120
Nitrobenzene-d5 (Surr)	66		27 - 120
Phenol-d6 (Surr)	37		10 - 120
p-Terphenyl-d14 (Surr)	77		45 - 120

Lab Sample ID: 380-170493-A-1-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 626828

Prep Batch: 625449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
1-Methylnaphthalene	<0.19		19.3	13.7		ug/L		71	36 - 120	
2-Methylnaphthalene	<0.19		19.3	13.5		ug/L		70	32 - 124	
Acenaphthene	<0.19		19.3	16.1		ug/L		83	47 - 145	
Acenaphthylene	<0.19		19.3	16.3		ug/L		85	33 - 145	
Anthracene	<0.19		19.3	16.8		ug/L		87	27 - 133	
Benzo[a]anthracene	<0.19		19.3	16.5		ug/L		86	33 - 143	
Benzo[a]pyrene	<0.19		19.3	17.2		ug/L		89	17 - 163	
Benzo[b]fluoranthene	<0.19		19.3	16.7		ug/L		86	24 - 159	
Benzo[g,h,i]perylene	<0.19		19.3	17.0		ug/L		88	1 - 219	
Benzo[k]fluoranthene	<0.19		19.3	17.3		ug/L		89	11 - 162	
Chrysene	<0.19		19.3	16.8		ug/L		87	17 - 168	
Dibenz(a,h)anthracene	<0.19		19.3	16.9		ug/L		87	1 - 227	
Fluoranthene	<0.19		19.3	17.0		ug/L		88	26 - 137	
Fluorene	<0.19		19.3	16.6		ug/L		86	59 - 121	
Indeno[1,2,3-cd]pyrene	<0.19		19.3	15.4		ug/L		80	1 - 171	
Naphthalene	<0.19		19.3	12.9		ug/L		67	21 - 133	
Phenanthrene	<0.19		19.3	16.2		ug/L		84	54 - 120	
Pyrene	<0.19		19.3	16.6		ug/L		86	52 - 120	

Surrogate	MS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	80		28 - 127
2-Fluorobiphenyl (Surr)	78		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	64		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	78		45 - 120

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-170493-A-1-B MSD

Matrix: Water

Analysis Batch: 626828

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 625449

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
1-Methylnaphthalene	<0.19		19.4	12.9		ug/L		67	36 - 120	6	30
2-Methylnaphthalene	<0.19		19.4	12.8		ug/L		66	32 - 124	5	30
Acenaphthene	<0.19		19.4	14.9		ug/L		77	47 - 145	8	48
Acenaphthylene	<0.19		19.4	15.1		ug/L		78	33 - 145	8	74
Anthracene	<0.19		19.4	14.9		ug/L		77	27 - 133	12	66
Benzo[a]anthracene	<0.19		19.4	14.6		ug/L		76	33 - 143	12	53
Benzo[a]pyrene	<0.19		19.4	15.1		ug/L		78	17 - 163	13	72
Benzo[b]fluoranthene	<0.19		19.4	14.5		ug/L		75	24 - 159	14	71
Benzo[g,h,i]perylene	<0.19		19.4	15.1		ug/L		78	1 - 219	12	97
Benzo[k]fluoranthene	<0.19		19.4	15.4		ug/L		79	11 - 162	12	63
Chrysene	<0.19		19.4	14.7		ug/L		76	17 - 168	13	87
Dibenz(a,h)anthracene	<0.19		19.4	15.1		ug/L		78	1 - 227	11	126
Fluoranthene	<0.19		19.4	14.8		ug/L		77	26 - 137	14	66
Fluorene	<0.19		19.4	15.0		ug/L		78	59 - 121	10	38
Indeno[1,2,3-cd]pyrene	<0.19		19.4	13.7		ug/L		71	1 - 171	12	99
Naphthalene	<0.19		19.4	12.5		ug/L		65	21 - 133	3	65
Phenanthrene	<0.19		19.4	14.4		ug/L		74	54 - 120	12	39
Pyrene	<0.19		19.4	14.8		ug/L		76	52 - 120	12	49

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	71		28 - 127
2-Fluorobiphenyl (Surr)	73		31 - 120
2-Fluorophenol (Surr)	52		17 - 120
Nitrobenzene-d5 (Surr)	61		27 - 120
Phenol-d6 (Surr)	33		10 - 120
p-Terphenyl-d14 (Surr)	71		45 - 120

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

Lab Sample ID: MB 570-626677/6

Matrix: Water

Analysis Batch: 626677

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			09/17/25 11:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	89		38 - 134		09/17/25 11:20	1

Lab Sample ID: LCS 570-626677/4

Matrix: Water

Analysis Batch: 626677

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				Limits
Gasoline Range Organics (C4-C13)	400	433		ug/L		108	78 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-626677/4
Matrix: Water
Analysis Batch: 626677

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

	LCS	LCS	
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	92		38 - 134

Lab Sample ID: LCSD 570-626677/5
Matrix: Water
Analysis Batch: 626677

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

<u>Analyte</u>		<u>Spike</u>	LCSD		<u>Unit</u>	<u>D</u>	<u>%Rec</u>	%Rec		<u>RPD</u>	<u>Limit</u>
			<u>Result</u>	<u>Qualifier</u>				<u>Limits</u>	<u>RPD</u>		
Gasoline Range Organics (C4-C13)		400	411		ug/L		103	78 - 120	5	10	

	LCSD	LCSD	
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	89		38 - 134

Lab Sample ID: MRL 570-626677/3
Matrix: Water
Analysis Batch: 626677

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

<u>Analyte</u>		<u>Spike</u>	MRL		<u>Unit</u>	<u>D</u>	<u>%Rec</u>	%Rec	
			<u>Result</u>	<u>Qualifier</u>				<u>Limits</u>	
Gasoline Range Organics (C4-C13)		10.0	13.7		ug/L		137	50 - 150	

	MRL	MRL	
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	90		38 - 134

Lab Sample ID: 570-246170-C-4 MS
Matrix: Water
Analysis Batch: 626677

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

<u>Analyte</u>	<u>Sample</u>	<u>Sample</u>	<u>Spike</u>	MS		<u>Unit</u>	<u>D</u>	<u>%Rec</u>	%Rec	
				<u>Result</u>	<u>Qualifier</u>				<u>Limits</u>	
Gasoline Range Organics (C4-C13)	<10		400	449		ug/L		112	68 - 122	

	MS	MS	
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	96		38 - 134

Lab Sample ID: 570-246170-E-4 MSD
Matrix: Water
Analysis Batch: 626677

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

<u>Analyte</u>	<u>Sample</u>	<u>Sample</u>	<u>Spike</u>	MSD		<u>Unit</u>	<u>D</u>	<u>%Rec</u>	%Rec		<u>RPD</u>	<u>Limit</u>
				<u>Result</u>	<u>Qualifier</u>				<u>Limits</u>	<u>RPD</u>		
Gasoline Range Organics (C4-C13)	<10		400	473		ug/L		118	68 - 122	5	18	

	MSD	MSD	
<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>
4-Bromofluorobenzene (Surr)	97		38 - 134

QC Sample Results

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-625548/1-A
Matrix: Water
Analysis Batch: 626815

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 625548

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		09/15/25 09:14	09/17/25 12:37	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/15/25 09:14	09/17/25 12:37	1
C8-C18	<25		25	ug/L		09/15/25 09:14	09/17/25 12:37	1
Surrogate	MB	MB	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	96		60 - 130			09/15/25 09:14	09/17/25 12:37	1

Lab Sample ID: LCS 570-625548/2-A
Matrix: Water
Analysis Batch: 626815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625548

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	1600	1500		ug/L		94	56 - 127
Surrogate	LCS	LCS	Limits				
n-Octacosane (Surr)	104		60 - 130				

Lab Sample ID: LCSD 570-625548/3-A
Matrix: Water
Analysis Batch: 626815

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 625548

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
		Result	Qualifier						
C10-C28	1600	1540		ug/L		96	56 - 127	2	23
Surrogate	LCSD	LCSD	Limits						
n-Octacosane (Surr)	97		60 - 130						

Lab Sample ID: MRL 570-625548/4-A
Matrix: Water
Analysis Batch: 626815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 625548

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	0.0200	0.0351	^3+	mg/L		175	50 - 150
Surrogate	MRL	MRL	Limits				
n-Octacosane (Surr)	93		60 - 130				

Lab Sample ID: 380-170493-C-1-A MS
Matrix: Water
Analysis Batch: 626815

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 625548

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
C10-C28	<26	^3+	1620	1620		ug/L		100	70 - 130
Surrogate	MS	MS	Limits						
n-Octacosane (Surr)	105		60 - 130						

QC Sample Results

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

Job ID: 380-170942-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-170493-C-1-B MSD

Matrix: Water

Analysis Batch: 626815

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 625548

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
C10-C28	<26	^3+	1630	1800		ug/L		111	70 - 130	10	20	
Surrogate	MSD %Recovery	MSD Qualifier	Limits									
<i>n</i> -Octacosane (Surr)	108		60 - 130									

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QC Association Summary

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

Job ID: 380-170942-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 174008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	525.2	
MB 380-174008/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-174008/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-174008/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-171070-B-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-170873-D-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 174128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	525.2	174008
MB 380-174008/20-A	Method Blank	Total/NA	Water	525.2	174008
LCS 380-174008/22-A	Lab Control Sample	Total/NA	Water	525.2	174008
MRL 380-174008/21-A	Lab Control Sample	Total/NA	Water	525.2	174008
380-171070-B-1-A MS	Matrix Spike	Total/NA	Water	525.2	174008
380-170873-D-1-A DU	Duplicate	Total/NA	Water	525.2	174008

Prep Batch: 625449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1	
MB 570-625449/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-625449/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-625449/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-170493-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-170493-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 626828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1 SIM	625449
MB 570-625449/1-A	Method Blank	Total/NA	Water	625.1 SIM	625449
LCS 570-625449/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	625449
LCSD 570-625449/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	625449
380-170493-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	625449
380-170493-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	625449

Analysis Batch: 628768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	625.1	625449
MB 570-625449/1-A	Method Blank	Total/NA	Water	625.1	625449

GC VOA

Analysis Batch: 626677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	8015B GRO LL	
380-170942-2	TB: HALAWA Shaft Viewing Pool	Total/NA	Water	8015B GRO LL	
MB 570-626677/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-626677/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-626677/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-626677/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
570-246170-C-4 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
570-246170-E-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-170942-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC Semi VOA

Prep Batch: 625548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	3510C	
MB 570-625548/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-625548/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-625548/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-625548/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-170493-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-170493-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 626815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-170942-1	HALAWA SHAFT Viewing Pool	Total/NA	Water	8015B	625548
MB 570-625548/1-A	Method Blank	Total/NA	Water	8015B	625548
LCS 570-625548/2-A	Lab Control Sample	Total/NA	Water	8015B	625548
LCSD 570-625548/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	625548
MRL 570-625548/4-A	Lab Control Sample	Total/NA	Water	8015B	625548
380-170493-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	625548
380-170493-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	625548



Lab Chronicle

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

Job ID: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT Viewing Pool

Lab Sample ID: 380-170942-1

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			174008	KRD3	EA POM	09/14/25 08:53
Total/NA	Analysis	525.2		1	174128	Q8LA	EA POM	09/15/25 14:01
Total/NA	Prep	625.1			625449	H1SH	EET CAL 4	09/15/25 04:33
Total/NA	Analysis	625.1		1	628768	PQS1	EET CAL 4	09/22/25 13:52
Total/NA	Prep	625.1			625449	H1SH	EET CAL 4	09/15/25 04:33
Total/NA	Analysis	625.1 SIM		1	626828	PQS1	EET CAL 4	09/17/25 22:04
Total/NA	Analysis	8015B GRO LL		1	626677	A9VE	EET CAL 4	09/17/25 12:52
Total/NA	Prep	3510C			625548	TVD6	EET CAL 4	09/15/25 09:17
Total/NA	Analysis	8015B		1	626815	NR	EET CAL 4	09/17/25 16:56

Client Sample ID: TB: HALAWA Shaft Viewing Pool

Lab Sample ID: 380-170942-2

Date Collected: 09/09/25 09:47

Matrix: Water

Date Received: 09/11/25 09:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	626677	A9VE	EET CAL 4	09/17/25 12:12

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: 380-170942-1
 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: 380-170942-1
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

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Method Summary

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

Job ID: 380-170942-1
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: 380-170942-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-170942-1	HALAWA SHAFT Viewing Pool	Water	09/09/25 09:47	09/11/25 09:47	Hawaii
380-170942-2	TB: HALAWA Shaft Viewing Pool	Water	09/09/25 09:47	09/11/25 09:47	Hawaii

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

Chain of Custody Record



Environment Testing

Client Information Client Contact: Mr. Kirk Iwamoto City & County of Honolulu Address: 630 South Beretania Street Chemistry Lab City: Honolulu State: HI, Zip: 96843 Phone: 808-748-5840 (Tel) Email: kiwamoto@hbws.org		Lab PM: Arada, Rachelle E-Mail: Rachelle.Arada@eurofins.com PWSID:	
Sampler: Jason Rakofsky Phone: +1 808 748 5840		Camer Tracking No(s): 380-28005-2757 1 State of Origin: Page 1 of 2 Job #:	
Due Date Requested: TAT Requested (days): Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PO #: C20525101 exp 05312023 WO #:		Analysis Requested Perform MR/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> 533 - All Analytes 537.1_DW_PREC - 537.1 Full List 526.2_PREC - (MOD) 526plus Plus TICs 8015B_DRO_LL_CS - HNL Ranges C10-C24/C24-C36/C8-C18 8015B_GRO_LL - (MOD) GRO 826.1_626.1_SIM	
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill Site: Hawaii		Preservation Codes: R - NaThioSO4 RA - NaThioHCl O - Na2SO3 QA - Na2SO3/HCl Y - Trizma I - NH4 Acetate Other:	
Sample Identification Halawa Shaft Viewing Pool TB: Halawa Shaft Viewing Pool		Special Instructions/Note: Total Number of Containers:	
Sample Date: 9-Sep-2025 Sample Time: 0955 Sample Type (C=Comp, G=grab): G Matrix (Invertor, Neutral, Oxidant): Water	Sample Date: 9-Sep-2025 Sample Time: 1100 Sample Type (C=Comp, G=grab): G Matrix (Invertor, Neutral, Oxidant): Water	R 2 RA 3 Q 2 QA 2 Y 2	Special Instructions/Note: 380-170942 COC
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: [Redacted] Date: 9/10/25 Time: 1100 Relinquished by: [Redacted] Date: 9/10/25 Time: 1100 Relinquished by: [Redacted] Date: 9/10/25 Time: 1100 Relinquished by: [Redacted] Date: 9/10/25 Time: 1100			
Custody Seals Intact: <input checked="" type="checkbox"/> Custody Seal No.			



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-170942-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 170942

List Number: 1

Creator: Tran, Kristine

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: 380-170942-1
SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 170942

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 09/12/25 01:55 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	