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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
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JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-173380-1

Eurofins Eaton Analytical Pomona

Job Notes

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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: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC VOA

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

Glossary

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

Case Narrative

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

Job ID: 380-173380-1

Job ID: 380-173380-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-173380-1

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 9/25/2025 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°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.

Detection Summary

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

No Detections.

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-2

No Detections.

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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: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2,4'-DDD	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2,4'-DDE	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2,4'-DDT	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2,4-Dinitrotoluene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2,6-Dinitrotoluene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
2-Methylnaphthalene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
4,4'-DDD	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
4,4'-DDE	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
4,4'-DDT	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Acenaphthene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Acenaphthylene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Acetochlor	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Alachlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
alpha-BHC	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
alpha-Chlordane	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Anthracene	<0.020		0.020	ug/L		09/28/25 10:14	09/29/25 16:50	1
Atrazine	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Benz(a)anthracene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Benzo[a]pyrene	<0.020		0.020	ug/L		09/28/25 10:14	09/29/25 16:50	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		09/28/25 10:14	09/29/25 16:50	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		09/28/25 10:14	09/29/25 16:50	1
beta-BHC	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		09/28/25 10:14	09/29/25 16:50	1
Bromacil	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Butachlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Butylbenzylphthalate	<0.50		0.50	ug/L		09/28/25 10:14	09/29/25 16:50	1
Chlorobenzilate	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Chloroneb	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Chlorothalonil (Draconil, Bravo)	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Chlorpyrifos	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Chrysene	<0.020		0.020	ug/L		09/28/25 10:14	09/29/25 16:50	1
delta-BHC	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		09/28/25 10:14	09/29/25 16:50	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Dieldrin	<0.010		0.010	ug/L		09/28/25 10:14	09/29/25 16:50	1
Diethylphthalate	<0.50		0.50	ug/L		09/28/25 10:14	09/29/25 16:50	1
Dimethylphthalate	<0.50		0.50	ug/L		09/28/25 10:14	09/29/25 16:50	1
Di-n-butyl phthalate	<1.0		1.0	ug/L		09/28/25 10:14	09/29/25 16:50	1
Di-n-octyl phthalate	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Endosulfan I (Alpha)	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Endosulfan II (Beta)	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Endosulfan sulfate	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Endrin	<0.010		0.010	ug/L		09/28/25 10:14	09/29/25 16:50	1
Endrin aldehyde	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
EPTC	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Fluoranthene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1

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Client Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
gamma-Chlordane	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Heptachlor	<0.010		0.010	ug/L		09/28/25 10:14	09/29/25 16:50	1
Heptachlor epoxide (isomer B)	<0.010		0.010	ug/L		09/28/25 10:14	09/29/25 16:50	1
Hexachlorobenzene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Indeno[1,2,3-cd]pyrene	<0.050	^3+	0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Isophorone	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Lindane	<0.010		0.010	ug/L		09/28/25 10:14	09/29/25 16:50	1
Malathion	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Methoxychlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Metolachlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Molinate	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Naphthalene	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Parathion	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Pendimethalin (Penoxaline)	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Phenanthrene	<0.040		0.040	ug/L		09/28/25 10:14	09/29/25 16:50	1
Propachlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Pyrene	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Simazine	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Terbacil	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Terbutylazine	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Thiobencarb	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		09/28/25 10:14	09/29/25 16:50	1
trans-Nonachlor	<0.050		0.050	ug/L		09/28/25 10:14	09/29/25 16:50	1
Trifluralin	<0.10		0.10	ug/L		09/28/25 10:14	09/29/25 16:50	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	09/28/25 10:14	09/29/25 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	96		70 - 130	09/28/25 10:14	09/29/25 16:50	1
Perylene-d12	94		70 - 130	09/28/25 10:14	09/29/25 16:50	1
Triphenylphosphate	105		70 - 130	09/28/25 10:14	09/29/25 16:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
2-Methylnaphthalene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Acenaphthene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Acenaphthylene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Anthracene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Benzo[a]anthracene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Benzo[a]pyrene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Chrysene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Fluoranthene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

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		09/29/25 13:23	10/07/25 15:55	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Naphthalene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Phenanthrene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1
Pyrene	<0.19		0.19	ug/L		09/29/25 13:23	10/07/25 15:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	68		28 - 127	09/29/25 13:23	10/07/25 15:55	1
2-Fluorobiphenyl (Surr)	58		31 - 120	09/29/25 13:23	10/07/25 15:55	1
2-Fluorophenol (Surr)	39		17 - 120	09/29/25 13:23	10/07/25 15:55	1
Nitrobenzene-d5 (Surr)	64		27 - 120	09/29/25 13:23	10/07/25 15:55	1
Phenol-d6 (Surr)	27		10 - 120	09/29/25 13:23	10/07/25 15:55	1
p-Terphenyl-d14 (Surr)	71		45 - 120	09/29/25 13:23	10/07/25 15:55	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	09/29/25 13:23	10/09/25 13:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	70		33 - 139	09/29/25 13:23	10/09/25 13:55	1
2-Fluorobiphenyl (Surr)	61		33 - 126	09/29/25 13:23	10/09/25 13:55	1
2-Fluorophenol (Surr)	44		12 - 120	09/29/25 13:23	10/09/25 13:55	1
Nitrobenzene-d5 (Surr)	81		36 - 120	09/29/25 13:23	10/09/25 13:55	1
Phenol-d6 (Surr)	28		10 - 120	09/29/25 13:23	10/09/25 13:55	1
p-Terphenyl-d14 (Surr)	73		47 - 131	09/29/25 13:23	10/09/25 13:55	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			10/05/25 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		38 - 134		10/05/25 20:11	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		09/29/25 09:55	10/07/25 05:29	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/29/25 09:55	10/07/25 05:29	1
C8-C18	<25		25	ug/L		09/29/25 09:55	10/07/25 05:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	104		60 - 130	09/29/25 09:55	10/07/25 05:29	1

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-2

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

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			10/05/25 23:52	1

Client Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-2

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

<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)	95		38 - 134		10/05/25 23:52	1

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Action Limit Summary

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

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	<0.050		ug/L	2	0.050	525.2	Total/NA
Atrazine	<0.050		ug/L	3	0.050	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.60		ug/L	6	0.60	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.60		ug/L	400	0.60	525.2	Total/NA
Endrin	<0.010		ug/L	2	0.010	525.2	Total/NA
Heptachlor	<0.010		ug/L	0.4	0.010	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.010		ug/L	0.2	0.010	525.2	Total/NA
Hexachlorobenzene	<0.050		ug/L	1	0.050	525.2	Total/NA
Hexachlorocyclopentadiene	<0.050		ug/L	50	0.050	525.2	Total/NA
Lindane	<0.010		ug/L	0.2	0.010	525.2	Total/NA
Methoxychlor	<0.050		ug/L	40	0.050	525.2	Total/NA
Simazine	<0.050		ug/L	4	0.050	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: 380-173380-1
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)
380-173380-1	HALAWA SHAFT VIEWING POOL	96	94	105
380-173380-1 MS	HALAWA SHAFT VIEWING POOL	98	101	108
380-173383-H-3-A DU	Duplicate	95	93	103
LCS 380-176654/22-A	Lab Control Sample	95	98	104
MB 380-176654/20-A	Method Blank	94	92	105
MRL 380-176654/21-A	Lab Control Sample	95	92	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)
380-173380-1	HALAWA SHAFT VIEWING POOL	70	61	44	81	28	73
MB 570-632763/1-A	Method Blank	86	82	57	111	38	91

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)
380-173380-1	HALAWA SHAFT VIEWING POOL	68	58	39	64	27	71
380-173388-A-1-A MS	Matrix Spike	78	77	58	79	39	80
380-173388-A-1-B MSD	Matrix Spike Duplicate	87	82	58	72	40	87
LCS 570-632763/2-A	Lab Control Sample	71	70	57	65	38	76
LCSd 570-632763/3-A	Lab Control Sample Dup	70	72	47	62	34	76
MB 570-632763/1-A	Method Blank	84	77	53	86	35	84

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: 380-173380-1
 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)	
380-173380-1	HALAWA SHAFT VIEWING POOL	98	
380-173380-2	TB: HALAWA SHAFT VIEWING POOL	95	
380-173388-B-1 MS	Matrix Spike	101	
380-173388-B-1 MSD	Matrix Spike Duplicate	100	
LCS 570-635834/1009	Lab Control Sample	98	
LCSD 570 635834/10	Lab Control Sample Dup	97	
MB 570-635834/11	Method Blank	94	
MRL 570-635834/1004	Lab Control Sample	97	
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)	
380-173380-1 - RA	HALAWA SHAFT VIEWING POOL	104	
380-173600-C-1-A MS	Matrix Spike	107	
380-173600-C-1-B MSD	Matrix Spike Duplicate	103	
LCS 570-632540/2-A	Lab Control Sample	92	
LCSD 570-632540/3-A	Lab Control Sample Dup	103	
MB 570-632540/1-A	Method Blank	92	
MRL 570-632540/4-A	Lab Control Sample	92	
Surrogate Legend			
OTCSN = n-Octacosane (Surr)			

QC Sample Results

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-176654/20-A
Matrix: Water
Analysis Batch: 176868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176654

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2,4'-DDD	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2,4'-DDE	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2,4'-DDT	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2,4-Dinitrotoluene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2,6-Dinitrotoluene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
2-Methylnaphthalene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
4,4'-DDD	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
4,4'-DDE	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
4,4'-DDT	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Acenaphthene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Acenaphthylene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Acetochlor	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Alachlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
alpha-BHC	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
alpha-Chlordane	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Anthracene	<0.019		0.019	ug/L		09/28/25 10:14	09/29/25 16:30	1
Atrazine	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Benz(a)anthracene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Benzo[a]pyrene	<0.019		0.019	ug/L		09/28/25 10:14	09/29/25 16:30	1
Benzo[b]fluoranthene	<0.019		0.019	ug/L		09/28/25 10:14	09/29/25 16:30	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Benzo[k]fluoranthene	<0.019		0.019	ug/L		09/28/25 10:14	09/29/25 16:30	1
beta-BHC	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58	ug/L		09/28/25 10:14	09/29/25 16:30	1
Bromacil	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Butachlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Butylbenzylphthalate	<0.49		0.49	ug/L		09/28/25 10:14	09/29/25 16:30	1
Chlorobenzilate	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Chloroneb	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Chlorpyrifos	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Chrysene	<0.019		0.019	ug/L		09/28/25 10:14	09/29/25 16:30	1
delta-BHC	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Di(2-ethylhexyl)adipate	<0.58		0.58	ug/L		09/28/25 10:14	09/29/25 16:30	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Dieldrin	<0.0097		0.0097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Diethylphthalate	<0.49		0.49	ug/L		09/28/25 10:14	09/29/25 16:30	1
Dimethylphthalate	<0.49		0.49	ug/L		09/28/25 10:14	09/29/25 16:30	1
Di-n-butyl phthalate	<0.97		0.97	ug/L		09/28/25 10:14	09/29/25 16:30	1
Di-n-octyl phthalate	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Endosulfan I (Alpha)	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Endosulfan II (Beta)	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Endosulfan sulfate	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Endrin	<0.0097		0.0097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Endrin aldehyde	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
EPTC	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1

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QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-176654/20-A
Matrix: Water
Analysis Batch: 176868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 176654

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Fluorene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
gamma-Chlordane	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Heptachlor	<0.0097		0.0097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Heptachlor epoxide (isomer B)	<0.0097		0.0097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Hexachlorobenzene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Isophorone	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Lindane	<0.0097		0.0097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Malathion	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Methoxychlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Metolachlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Molinate	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Naphthalene	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Parathion	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Pendimethalin (Penoxaline)	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Phenanthrene	<0.039		0.039	ug/L		09/28/25 10:14	09/29/25 16:30	1
Propachlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Pyrene	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Simazine	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Terbacil	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Terbutylazine	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Thiobencarb	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1
Total Permethrin (mixed isomers)	<0.19		0.19	ug/L		09/28/25 10:14	09/29/25 16:30	1
trans-Nonachlor	<0.049		0.049	ug/L		09/28/25 10:14	09/29/25 16:30	1
Trifluralin	<0.097		0.097	ug/L		09/28/25 10:14	09/29/25 16:30	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Decane	2.07	T J N	ug/L		2.75	124-18-5	09/28/25 10:14	09/29/25 16:30	1
Cyclopentasiloxane, decamethyl-	0.683	T J N	ug/L		3.23	541-02-6	09/28/25 10:14	09/29/25 16:30	1
9-Octadecenamamide, (Z)-	1.55	T J N	ug/L		7.86	301-02-0	09/28/25 10:14	09/29/25 16:30	1
13-Docosenamamide, (Z)-	0.816	T J N	ug/L		10.38	112-84-5	09/28/25 10:14	09/29/25 16:30	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	94		70 - 130	09/28/25 10:14	09/29/25 16:30	1
Perylene-d12	92		70 - 130	09/28/25 10:14	09/29/25 16:30	1
Triphenylphosphate	105		70 - 130	09/28/25 10:14	09/29/25 16:30	1

Lab Sample ID: LCS 380-176654/22-A
Matrix: Water
Analysis Batch: 176868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176654

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	1.95	1.90		ug/L		98	70 - 130
2,4'-DDD	1.95	1.89		ug/L		97	70 - 130
2,4'-DDE	1.95	1.95		ug/L		100	70 - 130
2,4'-DDT	1.95	1.84		ug/L		95	70 - 130

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QC Sample Results

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-176654/22-A

Matrix: Water

Analysis Batch: 176868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 176654

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
2,4-Dinitrotoluene	1.95	1.77		ug/L		91	70 - 130
2,6-Dinitrotoluene	1.95	1.91		ug/L		98	70 - 130
2-Methylnaphthalene	1.95	1.90		ug/L		98	70 - 130
4,4'-DDD	1.95	1.94		ug/L		99	70 - 130
4,4'-DDE	1.95	1.95		ug/L		100	70 - 130
4,4'-DDT	1.95	1.88		ug/L		96	70 - 130
Acenaphthene	1.95	1.88		ug/L		96	70 - 130
Acenaphthylene	1.95	1.74		ug/L		89	70 - 130
Acetochlor	1.95	1.84		ug/L		94	70 - 130
Alachlor	1.95	2.00		ug/L		103	70 - 130
alpha-BHC	1.95	1.77		ug/L		91	70 - 130
alpha-Chlordane	1.95	1.93		ug/L		99	70 - 130
Anthracene	1.95	1.68		ug/L		86	70 - 130
Atrazine	1.95	2.07		ug/L		106	70 - 130
Benz(a)anthracene	1.95	1.98		ug/L		101	70 - 130
Benzo[a]pyrene	1.95	2.08		ug/L		107	70 - 130
Benzo[b]fluoranthene	1.95	2.09		ug/L		107	70 - 130
Benzo[g,h,i]perylene	1.95	2.11		ug/L		108	70 - 130
Benzo[k]fluoranthene	1.95	1.98		ug/L		102	70 - 130
beta-BHC	1.95	1.86		ug/L		96	70 - 130
Bis(2-ethylhexyl) phthalate	1.95	1.95		ug/L		100	70 - 130
Bromacil	1.95	1.95		ug/L		100	70 - 130
Butachlor	1.95	1.90		ug/L		97	70 - 130
Butylbenzylphthalate	1.95	2.16		ug/L		111	70 - 130
Chlorobenzilate	1.95	1.78		ug/L		91	70 - 130
Chloroneb	1.95	1.94		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	1.95	1.94		ug/L		100	70 - 130
Chlorpyrifos	1.95	1.90		ug/L		98	70 - 130
Chrysene	1.95	1.95		ug/L		100	70 - 130
delta-BHC	1.95	1.72		ug/L		88	70 - 130
Di(2-ethylhexyl)adipate	1.95	2.05		ug/L		105	70 - 130
Dibenz(a,h)anthracene	1.95	2.11		ug/L		108	70 - 130
Diclorvos (DDVP)	1.95	2.04		ug/L		105	70 - 130
Dieldrin	1.95	1.89		ug/L		97	70 - 130
Diethylphthalate	1.95	2.04		ug/L		104	70 - 130
Dimethylphthalate	1.95	2.05		ug/L		105	70 - 130
Di-n-butyl phthalate	3.90	4.33		ug/L		111	70 - 130
Di-n-octyl phthalate	1.95	1.90		ug/L		97	70 - 130
Endosulfan I (Alpha)	1.95	1.76		ug/L		90	70 - 130
Endosulfan II (Beta)	1.95	1.83		ug/L		94	70 - 130
Endosulfan sulfate	1.95	1.97		ug/L		101	70 - 130
Endrin	1.95	2.00		ug/L		102	70 - 130
Endrin aldehyde	1.95	1.92		ug/L		99	60 - 130
EPTC	1.95	2.06		ug/L		106	70 - 130
Fluoranthene	1.95	2.00		ug/L		103	70 - 130
Fluorene	1.95	2.07		ug/L		106	70 - 130
gamma-Chlordane	1.95	1.93		ug/L		99	70 - 130
Heptachlor	1.95	2.09		ug/L		107	70 - 130
Heptachlor epoxide (isomer B)	1.95	2.09		ug/L		107	70 - 130

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QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-176654/22-A

Matrix: Water

Analysis Batch: 176868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 176654

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Hexachlorobenzene	1.95	1.90		ug/L		97	70 - 130
Hexachlorocyclopentadiene	1.95	1.76		ug/L		90	70 - 130
Indeno[1,2,3-cd]pyrene	1.95	2.05		ug/L		105	70 - 130
Isophorone	1.95	2.01		ug/L		103	70 - 130
Lindane	1.95	2.04		ug/L		104	70 - 130
Malathion	1.95	1.95		ug/L		100	70 - 130
Methoxychlor	1.95	1.96		ug/L		100	70 - 130
Metolachlor	1.95	1.84		ug/L		95	70 - 130
Molinate	1.95	2.11		ug/L		108	70 - 130
Naphthalene	1.95	1.93		ug/L		99	70 - 130
Parathion	1.95	1.86		ug/L		95	70 - 130
Pendimethalin (Penoxaline)	1.95	1.76		ug/L		91	70 - 130
Phenanthrene	1.95	1.90		ug/L		98	70 - 130
Propachlor	1.95	2.09		ug/L		107	70 - 130
Pyrene	1.95	1.91		ug/L		98	70 - 130
Simazine	1.95	1.95		ug/L		100	70 - 130
Terbacil	1.95	1.99		ug/L		102	70 - 130
Terbutylazine	1.95	1.97		ug/L		101	70 - 130
Thiobencarb	1.95	1.95		ug/L		100	70 - 130
trans-Nonachlor	1.95	1.98		ug/L		101	70 - 130
Trifluralin	1.95	1.73		ug/L		89	70 - 130

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	104		70 - 130

Lab Sample ID: MRL 380-176654/21-A

Matrix: Water

Analysis Batch: 176868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 176654

Analyte	Spike Added	MRL	MRL	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1-Methylnaphthalene	0.0971	0.109		ug/L		112	50 - 150
2,4'-DDD	0.0971	0.0949	J	ug/L		98	50 - 150
2,4'-DDE	0.0971	0.0966	J	ug/L		99	50 - 150
2,4'-DDT	0.0971	0.110		ug/L		113	50 - 150
2,4-Dinitrotoluene	0.0971	0.102		ug/L		105	50 - 150
2,6-Dinitrotoluene	0.0971	0.129		ug/L		133	50 - 150
2-Methylnaphthalene	0.0971	0.105		ug/L		108	50 - 150
4,4'-DDD	0.0971	0.111		ug/L		114	50 - 150
4,4'-DDE	0.0971	0.106		ug/L		109	50 - 150
4,4'-DDT	0.0971	0.115		ug/L		119	50 - 150
Acenaphthene	0.0971	0.0884	J	ug/L		91	50 - 150
Acenaphthylene	0.0971	0.0972		ug/L		100	50 - 150
Acetochlor	0.0971	0.106		ug/L		109	50 - 150
Alachlor	0.0486	0.0487	J	ug/L		100	50 - 150
alpha-BHC	0.0971	0.0893	J	ug/L		92	50 - 150
alpha-Chlordane	0.0243	0.0362	J	ug/L		149	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-176654/21-A

Matrix: Water

Analysis Batch: 176868

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 176654

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	0.0194	0.0224		ug/L		115	50 - 150
Atrazine	0.0486	0.0687		ug/L		141	50 - 150
Benz(a)anthracene	0.0486	0.0467	J	ug/L		96	50 - 150
Benzo[a]pyrene	0.0194	0.0235		ug/L		121	50 - 150
Benzo[b]fluoranthene	0.0194	0.0264		ug/L		136	50 - 150
Benzo[g,h,i]perylene	0.0486	0.0604		ug/L		124	50 - 150
Benzo[k]fluoranthene	0.0194	0.0262		ug/L		135	50 - 150
beta-BHC	0.0971	0.0977		ug/L		101	50 - 150
Bis(2-ethylhexyl) phthalate	0.583	0.588		ug/L		101	50 - 150
Bromacil	0.0971	0.122		ug/L		125	50 - 150
Butachlor	0.0486	0.0605		ug/L		124	50 - 150
Butylbenzylphthalate	0.486	0.592		ug/L		122	50 - 150
Chlorobenzilate	0.0971	0.0916	J	ug/L		94	50 - 150
Chloroneb	0.0971	0.102		ug/L		105	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0971	0.107		ug/L		110	50 - 150
Chlorpyrifos	0.0486	0.0554		ug/L		114	50 - 150
Chrysene	0.0194	0.0225		ug/L		116	50 - 150
delta-BHC	0.0971	0.0891	J	ug/L		92	50 - 150
Di(2-ethylhexyl)adipate	0.583	0.630		ug/L		108	50 - 150
Dibenz(a,h)anthracene	0.0486	0.0635		ug/L		131	50 - 150
Diclorvos (DDVP)	0.0486	0.0592		ug/L		122	50 - 150
Dieldrin	0.00971	0.0119		ug/L		123	50 - 150
Diethylphthalate	0.486	0.504		ug/L		104	50 - 150
Dimethylphthalate	0.486	0.513		ug/L		106	50 - 150
Di-n-butyl phthalate	0.486	0.877	J	ug/L		181	49 - 243
Di-n-octyl phthalate	0.0971	0.102		ug/L		105	50 - 150
Endosulfan I (Alpha)	0.0971	0.0816	J	ug/L		84	50 - 150
Endosulfan II (Beta)	0.0971	0.0921	J	ug/L		95	50 - 150
Endosulfan sulfate	0.0971	0.106		ug/L		109	50 - 150
Endrin	0.00971	0.00961	J	ug/L		99	50 - 150
Endrin aldehyde	0.0971	0.123		ug/L		127	50 - 150
EPTC	0.0971	0.101		ug/L		104	50 - 150
Fluoranthene	0.0971	0.105		ug/L		108	50 - 150
Fluorene	0.0486	0.0514		ug/L		106	50 - 150
gamma-Chlordane	0.0243	0.0328	J	ug/L		135	50 - 150
Heptachlor	0.00971	0.0125		ug/L		129	50 - 150
Heptachlor epoxide (isomer B)	0.00971	0.0133		ug/L		136	50 - 150
Hexachlorobenzene	0.0486	0.0474	J	ug/L		98	50 - 150
Hexachlorocyclopentadiene	0.0486	0.0488	J	ug/L		100	50 - 150
Indeno[1,2,3-cd]pyrene	0.0486	0.0747	^3+	ug/L		154	50 - 150
Isophorone	0.0971	0.111		ug/L		114	50 - 150
Lindane	0.00971	0.0113		ug/L		116	50 - 150
Malathion	0.0971	0.109		ug/L		112	50 - 150
Methoxychlor	0.0486	0.0692		ug/L		143	50 - 150
Metolachlor	0.0486	0.0571		ug/L		117	50 - 150
Molinate	0.0971	0.104		ug/L		107	50 - 150
Naphthalene	0.0971	0.113		ug/L		116	50 - 150
Parathion	0.0971	0.0943	J	ug/L		97	50 - 150
Pendimethalin (Penoxaline)	0.0971	0.0992		ug/L		102	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-176654/21-A
Matrix: Water
Analysis Batch: 176868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 176654

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
Phenanthrene	0.0389	0.0428		ug/L		110	50 - 150
Propachlor	0.0486	0.0522		ug/L		107	50 - 150
Pyrene	0.0486	0.0532		ug/L		110	50 - 150
Simazine	0.0486	0.0595		ug/L		123	50 - 150
Terbacil	0.0971	0.100		ug/L		103	50 - 150
Terbutylazine	0.0971	0.104		ug/L		107	50 - 150
Thiobencarb	0.0971	0.105		ug/L		108	50 - 150
trans-Nonachlor	0.0243	0.0364	J	ug/L		150	50 - 150
Trifluralin	0.0971	0.0976		ug/L		100	50 - 150

Surrogate	MRL	MRL	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	102		70 - 130

Lab Sample ID: 380-173380-1 MS
Matrix: Water
Analysis Batch: 176868

Client Sample ID: HALAWA SHAFT VIEWING POOL
Prep Type: Total/NA
Prep Batch: 176654

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.10		1.95	1.96		ug/L		100	70 - 130
2,4'-DDD	<0.10		1.95	1.97		ug/L		101	70 - 130
2,4'-DDE	<0.10		1.95	2.02		ug/L		104	70 - 130
2,4'-DDT	<0.10		1.95	2.00		ug/L		103	70 - 130
2,4-Dinitrotoluene	<0.10		1.95	1.97		ug/L		101	70 - 130
2,6-Dinitrotoluene	<0.10		1.95	2.06		ug/L		106	70 - 130
2-Methylnaphthalene	<0.10		1.95	2.00		ug/L		103	70 - 130
4,4'-DDD	<0.10		1.95	2.06		ug/L		106	70 - 130
4,4'-DDE	<0.10		1.95	2.03		ug/L		104	70 - 130
4,4'-DDT	<0.10		1.95	2.00		ug/L		103	70 - 130
Acenaphthene	<0.10		1.95	1.96		ug/L		101	70 - 130
Acenaphthylene	<0.10		1.95	1.86		ug/L		96	70 - 130
Acetochlor	<0.10		1.95	1.91		ug/L		98	70 - 130
Alachlor	<0.050		1.95	2.09		ug/L		108	70 - 130
alpha-BHC	<0.10		1.95	1.85		ug/L		95	70 - 130
alpha-Chlordane	<0.050		1.95	2.01		ug/L		103	70 - 130
Anthracene	<0.020		1.95	1.44		ug/L		74	70 - 130
Atrazine	<0.050		1.95	2.06		ug/L		106	70 - 130
Benz(a)anthracene	<0.050		1.95	2.08		ug/L		107	70 - 130
Benzo[a]pyrene	<0.020		1.95	2.10		ug/L		108	70 - 130
Benzo[b]fluoranthene	<0.020		1.95	2.19		ug/L		113	70 - 130
Benzo[g,h,i]perylene	<0.050		1.95	2.18		ug/L		112	70 - 130
Benzo[k]fluoranthene	<0.020		1.95	2.00		ug/L		103	70 - 130
beta-BHC	<0.10		1.95	1.89		ug/L		97	70 - 130
Bis(2-ethylhexyl) phthalate	<0.60		1.95	2.06		ug/L		106	70 - 130
Bromacil	<0.10		1.95	2.12		ug/L		109	70 - 130
Butachlor	<0.050		1.95	1.99		ug/L		102	70 - 130
Butylbenzylphthalate	<0.50		1.95	2.25		ug/L		115	70 - 130

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-173380-1 MS

Client Sample ID: HALAWA SHAFT VIEWING POOL

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 176868

Prep Batch: 176654

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Chlorobenzilate	<0.10		1.95	1.88		ug/L		96	70 - 130
Chloroneb	<0.10		1.95	1.95		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.10		1.95	1.99		ug/L		102	70 - 130
Chlorpyrifos	<0.050		1.95	2.00		ug/L		103	70 - 130
Chrysene	<0.020		1.95	1.99		ug/L		102	70 - 130
delta-BHC	<0.10		1.95	1.77		ug/L		91	70 - 130
Di(2-ethylhexyl)adipate	<0.60		1.95	2.17		ug/L		112	70 - 130
Dibenz(a,h)anthracene	<0.050		1.95	2.10		ug/L		108	70 - 130
Diclorvos (DDVP)	<0.050		1.95	2.12		ug/L		109	70 - 130
Dieldrin	<0.010		1.95	2.00		ug/L		103	70 - 130
Diethylphthalate	<0.50		1.95	2.09		ug/L		107	70 - 130
Dimethylphthalate	<0.50		1.95	2.13		ug/L		109	70 - 130
Di-n-butyl phthalate	<1.0		3.89	4.54		ug/L		117	70 - 130
Di-n-octyl phthalate	<0.10		1.95	2.01		ug/L		103	70 - 130
Endosulfan I (Alpha)	<0.10		1.95	1.87		ug/L		96	70 - 130
Endosulfan II (Beta)	<0.10		1.95	1.93		ug/L		99	70 - 130
Endosulfan sulfate	<0.10		1.95	2.06		ug/L		106	70 - 130
Endrin	<0.010		1.95	2.08		ug/L		107	70 - 130
Endrin aldehyde	<0.10		1.95	1.71		ug/L		88	60 - 130
EPTC	<0.10		1.95	2.17		ug/L		111	70 - 130
Fluoranthene	<0.10		1.95	2.07		ug/L		106	70 - 130
Fluorene	<0.050		1.95	2.12		ug/L		109	70 - 130
gamma-Chlordane	<0.050		1.95	2.01		ug/L		103	70 - 130
Heptachlor	<0.010		1.95	2.20		ug/L		113	70 - 130
Heptachlor epoxide (isomer B)	<0.010		1.95	2.21		ug/L		114	70 - 130
Hexachlorobenzene	<0.050		1.95	1.94		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.050		1.95	1.88		ug/L		97	70 - 130
Indeno[1,2,3-cd]pyrene	<0.050	^3+	1.95	2.17		ug/L		111	70 - 130
Isophorone	<0.10		1.95	2.10		ug/L		108	70 - 130
Lindane	<0.010		1.95	2.03		ug/L		104	70 - 130
Malathion	<0.10		1.95	2.06		ug/L		106	70 - 130
Methoxychlor	<0.050		1.95	2.10		ug/L		108	70 - 130
Metolachlor	<0.050		1.95	1.93		ug/L		99	70 - 130
Molinate	<0.10		1.95	2.15		ug/L		111	70 - 130
Naphthalene	<0.10		1.95	2.00		ug/L		103	70 - 130
Parathion	<0.10		1.95	2.01		ug/L		103	70 - 130
Pendimethalin (Penoxaline)	<0.10		1.95	2.00		ug/L		103	70 - 130
Phenanthrene	<0.040		1.95	1.95		ug/L		100	70 - 130
Propachlor	<0.050		1.95	2.14		ug/L		110	70 - 130
Pyrene	<0.050		1.95	2.00		ug/L		103	70 - 130
Simazine	<0.050		1.95	2.02		ug/L		104	70 - 130
Terbacil	<0.10		1.95	2.08		ug/L		107	70 - 130
Terbutylazine	<0.10		1.95	2.01		ug/L		103	70 - 130
Thiobencarb	<0.10		1.95	2.04		ug/L		105	70 - 130
trans-Nonachlor	<0.050		1.95	1.99		ug/L		102	70 - 130
Trifluralin	<0.10		1.95	1.87		ug/L		96	70 - 130

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-173380-1 MS

Matrix: Water

Analysis Batch: 176868

Client Sample ID: HALAWA SHAFT VIEWING POOL

Prep Type: Total/NA

Prep Batch: 176654

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	98		70 - 130
Perylene-d12	101		70 - 130
Triphenylphosphate	108		70 - 130

Lab Sample ID: 380-173383-H-3-A DU

Matrix: Water

Analysis Batch: 176868

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 176654

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
2,4'-DDD	<0.098		<0.098		ug/L		NC	20
2,4'-DDE	<0.098		<0.098		ug/L		NC	20
2,4'-DDT	<0.098		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.098		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.098		<0.098		ug/L		NC	20
4,4'-DDD	<0.098		<0.098		ug/L		NC	20
4,4'-DDE	<0.098		<0.098		ug/L		NC	20
4,4'-DDT	<0.098		<0.098		ug/L		NC	20
Acenaphthene	<0.098		<0.098		ug/L		NC	20
Acenaphthylene	<0.098		<0.098		ug/L		NC	20
Acetochlor	<0.098		<0.098		ug/L		NC	20
Alachlor	<0.049		<0.049		ug/L		NC	20
alpha-BHC	<0.098		<0.098		ug/L		NC	20
alpha-Chlordane	<0.049		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.049		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.049		<0.049		ug/L		NC	20
Benzo[a]pyrene	<0.020		<0.020		ug/L		NC	20
Benzo[b]fluoranthene	<0.020		<0.020		ug/L		NC	20
Benzo[g,h,i]perylene	<0.049		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.098		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.59		<0.59		ug/L		NC	20
Bromacil	<0.098		<0.098		ug/L		NC	20
Butachlor	<0.049		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.49		<0.49		ug/L		NC	20
Chlorobenzilate	<0.098		<0.098		ug/L		NC	20
Chloroneb	<0.098		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.098		<0.098		ug/L		NC	20
Chlorpyrifos	<0.049		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.098		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.59		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.049		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.049		<0.049		ug/L		NC	20
Dieldrin	0.072		0.0661		ug/L		9	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20

QC Sample Results

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-173383-H-3-A DU
Matrix: Water
Analysis Batch: 176868

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 176654

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Dimethylphthalate	<0.49		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.98		<0.98		ug/L		NC	20
Di-n-octyl phthalate	<0.098		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.098		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.098		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.098		<0.098		ug/L		NC	20
Endrin	<0.0098		<0.0098		ug/L		NC	20
Endrin aldehyde	<0.098		<0.098		ug/L		NC	20
EPTC	<0.098		<0.098		ug/L		NC	20
Fluoranthene	<0.098		<0.098		ug/L		NC	20
Fluorene	<0.049		<0.049		ug/L		NC	20
gamma-Chlordane	<0.049		<0.049		ug/L		NC	20
Heptachlor	<0.0098		<0.0098		ug/L		NC	20
Heptachlor epoxide (isomer B)	0.015		0.0152		ug/L		2	20
Hexachlorobenzene	<0.049		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.049		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.049	^3+	<0.049		ug/L		NC	20
Isophorone	<0.098		<0.098		ug/L		NC	20
Lindane	<0.0098		<0.0098		ug/L		NC	20
Malathion	<0.098		<0.098		ug/L		NC	20
Methoxychlor	<0.049		<0.049		ug/L		NC	20
Metolachlor	<0.049		<0.049		ug/L		NC	20
Molinate	<0.098		<0.098		ug/L		NC	20
Naphthalene	<0.098		<0.098		ug/L		NC	20
Parathion	<0.098		<0.098		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.098		<0.098		ug/L		NC	20
Phenanthrene	<0.039		<0.039		ug/L		NC	20
Propachlor	<0.049		<0.049		ug/L		NC	20
Pyrene	<0.049		<0.049		ug/L		NC	20
Simazine	<0.049		<0.049		ug/L		NC	20
Terbacil	<0.098		<0.098		ug/L		NC	20
Terbutylazine	<0.098		<0.098		ug/L		NC	20
Thiobencarb	<0.098		<0.098		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.049		<0.049		ug/L		NC	20
Trifluralin	<0.098		<0.098		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	93		70 - 130
Triphenylphosphate	103		70 - 130

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-632763/1-A
Matrix: Water
Analysis Batch: 637854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632763

<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>09/29/25 13:23</i>	<i>10/09/25 10:56</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>	<i>86</i>		<i>33 - 139</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>82</i>		<i>33 - 126</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>57</i>		<i>12 - 120</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>111</i>		<i>36 - 120</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>38</i>		<i>10 - 120</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>91</i>		<i>47 - 131</i>	<i>09/29/25 13:23</i>	<i>10/09/25 10:56</i>	<i>1</i>

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

Lab Sample ID: MB 570-632763/1-A
Matrix: Water
Analysis Batch: 636543

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632763

<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>
<i>1-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>2-Methylnaphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Acenaphthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Acenaphthylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Benzo[a]anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Benzo[a]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Benzo[b]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Benzo[g,h,i]perylene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Benzo[k]fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Chrysene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Dibenz(a,h)anthracene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Fluoranthene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Fluorene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Indeno[1,2,3-cd]pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Naphthalene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Phenanthrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Pyrene</i>	<i><0.20</i>		<i>0.20</i>	<i>ug/L</i>		<i>09/29/25 13:23</i>	<i>10/07/25 08:59</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>	<i>84</i>		<i>28 - 127</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>2-Fluorobiphenyl (Surr)</i>	<i>77</i>		<i>31 - 120</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>2-Fluorophenol (Surr)</i>	<i>53</i>		<i>17 - 120</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Nitrobenzene-d5 (Surr)</i>	<i>86</i>		<i>27 - 120</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>Phenol-d6 (Surr)</i>	<i>35</i>		<i>10 - 120</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>
<i>p-Terphenyl-d14 (Surr)</i>	<i>84</i>		<i>45 - 120</i>	<i>09/29/25 13:23</i>	<i>10/07/25 08:59</i>	<i>1</i>

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-632763/2-A

Matrix: Water

Analysis Batch: 636543

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 632763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
1-Methylnaphthalene	20.0	13.7		ug/L		68	47 - 120	
2-Methylnaphthalene	20.0	13.5		ug/L		67	43 - 120	
Acenaphthene	20.0	16.1		ug/L		81	60 - 132	
Acenaphthylene	20.0	16.3		ug/L		81	54 - 126	
Anthracene	20.0	15.8		ug/L		79	43 - 120	
Benzo[a]anthracene	20.0	16.1		ug/L		81	42 - 133	
Benzo[a]pyrene	20.0	16.6		ug/L		83	32 - 148	
Benzo[b]fluoranthene	20.0	16.4		ug/L		82	42 - 140	
Benzo[g,h,i]perylene	20.0	15.8		ug/L		79	1 - 195	
Benzo[k]fluoranthene	20.0	16.4		ug/L		82	25 - 146	
Chrysene	20.0	16.4		ug/L		82	44 - 140	
Dibenz(a,h)anthracene	20.0	17.0		ug/L		85	1 - 200	
Fluoranthene	20.0	17.2		ug/L		86	43 - 121	
Fluorene	20.0	16.6		ug/L		83	70 - 120	
Indeno[1,2,3-cd]pyrene	20.0	16.3		ug/L		81	1 - 151	
Naphthalene	20.0	13.1		ug/L		66	36 - 120	
Phenanthrene	20.0	16.1		ug/L		81	65 - 120	
Pyrene	20.0	16.9		ug/L		84	70 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	71		28 - 127
2-Fluorobiphenyl (Surr)	70		31 - 120
2-Fluorophenol (Surr)	57		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	38		10 - 120
p-Terphenyl-d14 (Surr)	76		45 - 120

Lab Sample ID: LCSD 570-632763/3-A

Matrix: Water

Analysis Batch: 636543

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 632763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
									RPD	Limit
1-Methylnaphthalene	20.0	13.4		ug/L		67	47 - 120	2	20	
2-Methylnaphthalene	20.0	13.1		ug/L		65	43 - 120	3	20	
Acenaphthene	20.0	15.7		ug/L		78	60 - 132	3	29	
Acenaphthylene	20.0	15.9		ug/L		79	54 - 126	3	45	
Anthracene	20.0	15.7		ug/L		78	43 - 120	1	40	
Benzo[a]anthracene	20.0	16.1		ug/L		80	42 - 133	0	32	
Benzo[a]pyrene	20.0	16.4		ug/L		82	32 - 148	2	43	
Benzo[b]fluoranthene	20.0	16.2		ug/L		81	42 - 140	1	43	
Benzo[g,h,i]perylene	20.0	16.2		ug/L		81	1 - 195	2	61	
Benzo[k]fluoranthene	20.0	16.3		ug/L		82	25 - 146	0	38	
Chrysene	20.0	16.2		ug/L		81	44 - 140	1	53	
Dibenz(a,h)anthracene	20.0	16.4		ug/L		82	1 - 200	4	75	
Fluoranthene	20.0	17.0		ug/L		85	43 - 121	1	40	
Fluorene	20.0	16.5		ug/L		82	70 - 120	1	23	
Indeno[1,2,3-cd]pyrene	20.0	16.3		ug/L		81	1 - 151	0	60	
Naphthalene	20.0	12.1		ug/L		61	36 - 120	8	39	

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 570-632763/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 636543

Prep Batch: 632763

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	20.0	15.9		ug/L		80	65 - 120	1	24
Pyrene	20.0	16.6		ug/L		83	70 - 120	2	30

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	70		28 - 127
2-Fluorobiphenyl (Surr)	72		31 - 120
2-Fluorophenol (Surr)	47		17 - 120
Nitrobenzene-d5 (Surr)	62		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	76		45 - 120

Lab Sample ID: 380-173388-A-1-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 636543

Prep Batch: 632763

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.5	15.8		ug/L		81	36 - 120
2-Methylnaphthalene	<0.19		19.5	15.7		ug/L		81	32 - 124
Acenaphthene	<0.19		19.5	16.2		ug/L		83	47 - 145
Acenaphthylene	<0.19		19.5	16.0		ug/L		82	33 - 145
Anthracene	<0.19		19.5	15.7		ug/L		81	27 - 133
Benzo[a]anthracene	<0.19		19.5	16.1		ug/L		82	33 - 143
Benzo[a]pyrene	<0.19		19.5	16.2		ug/L		83	17 - 163
Benzo[b]fluoranthene	<0.19		19.5	15.9		ug/L		82	24 - 159
Benzo[g,h,i]perylene	<0.19		19.5	15.7		ug/L		80	1 - 219
Benzo[k]fluoranthene	<0.19		19.5	16.2		ug/L		83	11 - 162
Chrysene	<0.19		19.5	16.4		ug/L		84	17 - 168
Dibenz(a,h)anthracene	<0.19		19.5	16.1		ug/L		83	1 - 227
Fluoranthene	<0.19		19.5	16.9		ug/L		87	26 - 137
Fluorene	<0.19		19.5	16.4		ug/L		84	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.5	16.0		ug/L		82	1 - 171
Naphthalene	<0.19		19.5	15.5		ug/L		80	21 - 133
Phenanthrene	<0.19		19.5	16.2		ug/L		83	54 - 120
Pyrene	<0.19		19.5	17.0		ug/L		87	52 - 120

Surrogate	MS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	78		28 - 127
2-Fluorobiphenyl (Surr)	77		31 - 120
2-Fluorophenol (Surr)	58		17 - 120
Nitrobenzene-d5 (Surr)	79		27 - 120
Phenol-d6 (Surr)	39		10 - 120
p-Terphenyl-d14 (Surr)	80		45 - 120

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-173388-A-1-B MSD

Matrix: Water
Analysis Batch: 636543

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA
Prep Batch: 632763

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1-Methylnaphthalene	<0.19		19.5	14.5		ug/L		75	36 - 120	9	30
2-Methylnaphthalene	<0.19		19.5	14.3		ug/L		74	32 - 124	10	30
Acenaphthene	<0.19		19.5	16.9		ug/L		87	47 - 145	4	48
Acenaphthylene	<0.19		19.5	17.0		ug/L		87	33 - 145	6	74
Anthracene	<0.19		19.5	16.5		ug/L		85	27 - 133	5	66
Benzo[a]anthracene	<0.19		19.5	17.1		ug/L		88	33 - 143	6	53
Benzo[a]pyrene	<0.19		19.5	17.2		ug/L		89	17 - 163	6	72
Benzo[b]fluoranthene	<0.19		19.5	16.9		ug/L		87	24 - 159	6	71
Benzo[g,h,i]perylene	<0.19		19.5	16.7		ug/L		86	1 - 219	6	97
Benzo[k]fluoranthene	<0.19		19.5	17.1		ug/L		88	11 - 162	5	63
Chrysene	<0.19		19.5	17.5		ug/L		90	17 - 168	6	87
Dibenz(a,h)anthracene	<0.19		19.5	17.6		ug/L		90	1 - 227	8	126
Fluoranthene	<0.19		19.5	17.7		ug/L		91	26 - 137	5	66
Fluorene	<0.19		19.5	17.3		ug/L		89	59 - 121	5	38
Indeno[1,2,3-cd]pyrene	<0.19		19.5	17.1		ug/L		88	1 - 171	6	99
Naphthalene	<0.19		19.5	13.6		ug/L		70	21 - 133	14	65
Phenanthrene	<0.19		19.5	17.0		ug/L		87	54 - 120	5	39
Pyrene	<0.19		19.5	18.0		ug/L		93	52 - 120	6	49

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	87		28 - 127
2-Fluorobiphenyl (Surr)	82		31 - 120
2-Fluorophenol (Surr)	58		17 - 120
Nitrobenzene-d5 (Surr)	72		27 - 120
Phenol-d6 (Surr)	40		10 - 120
p-Terphenyl-d14 (Surr)	87		45 - 120

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

Lab Sample ID: MB 570-635834/11

Matrix: Water
Analysis Batch: 635834

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			10/05/25 17:30	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	94		38 - 134		10/05/25 17:30	1

Lab Sample ID: LCS 570-635834/1009

Matrix: Water
Analysis Batch: 635834

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	410		ug/L		103	78 - 120

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-635834/1009
Matrix: Water
Analysis Batch: 635834

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

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		38 - 134

Lab Sample ID: LCSD 570-635834/10
Matrix: Water
Analysis Batch: 635834

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	400	407		ug/L		102	78 - 120	1	10

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		38 - 134

Lab Sample ID: MRL 570-635834/1004
Matrix: Water
Analysis Batch: 635834

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	9.97	J	ug/L		100	50 - 150

	MRL	MRL	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		38 - 134

Lab Sample ID: 380-173388-B-1 MS
Matrix: Water
Analysis Batch: 635834

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	421		ug/L		105	68 - 122

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

Lab Sample ID: 380-173388-B-1 MSD
Matrix: Water
Analysis Batch: 635834

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	424		ug/L		106	68 - 122	1	18

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		38 - 134

QC Sample Results

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-632540/1-A
Matrix: Water
Analysis Batch: 635719

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 632540

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (C10-C24)	<25		25	ug/L		09/29/25 09:54	10/05/25 00:50	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/29/25 09:54	10/05/25 00:50	1
C8-C18	<25		25	ug/L		09/29/25 09:54	10/05/25 00:50	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
n-Octacosane (Surr)	92		60 - 130			09/29/25 09:54	10/05/25 00:50	1

Lab Sample ID: LCS 570-632540/2-A
Matrix: Water
Analysis Batch: 635719

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632540

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	1600	1590		ug/L		100	56 - 127
Surrogate	LCS LCS		Limits				
	%Recovery	Qualifier					
n-Octacosane (Surr)	92		60 - 130				

Lab Sample ID: LCSD 570-632540/3-A
Matrix: Water
Analysis Batch: 635719

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 632540

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec Limits	RPD	
		Result	Qualifier					RPD	Limit
C10-C28	1600	1860		ug/L		116	56 - 127	15	23
Surrogate	LCSD LCSD		Limits						
	%Recovery	Qualifier							
n-Octacosane (Surr)	103		60 - 130						

Lab Sample ID: MRL 570-632540/4-A
Matrix: Water
Analysis Batch: 636470

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 632540

Analyte	Spike Added	MRL MRL		Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
C10-C28	0.0200	0.0276		mg/L		138	50 - 150
Surrogate	MRL MRL		Limits				
	%Recovery	Qualifier					
n-Octacosane (Surr)	92		60 - 130				

Lab Sample ID: 380-173600-C-1-A MS
Matrix: Water
Analysis Batch: 635719

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 632540

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
C10-C28	<26		1630	1980		ug/L		122	70 - 130
Surrogate	MS MS		Limits						
	%Recovery	Qualifier							
n-Octacosane (Surr)	107		60 - 130						

QC Sample Results

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-173600-C-1-B MSD

Matrix: Water

Analysis Batch: 635719

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 632540

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26		1640	1990		ug/L		121	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
<i>n-Octacosane (Surr)</i>	103		60 - 130								

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QC Association Summary

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 176654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
MB 380-176654/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-176654/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-176654/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-173380-1 MS	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
380-173383-H-3-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 176868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	176654
MB 380-176654/20-A	Method Blank	Total/NA	Water	525.2	176654
LCS 380-176654/22-A	Lab Control Sample	Total/NA	Water	525.2	176654
MRL 380-176654/21-A	Lab Control Sample	Total/NA	Water	525.2	176654
380-173380-1 MS	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	176654
380-173383-H-3-A DU	Duplicate	Total/NA	Water	525.2	176654

Prep Batch: 632763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	
MB 570-632763/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-632763/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-632763/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-173388-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-173388-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 636543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1 SIM	632763
MB 570-632763/1-A	Method Blank	Total/NA	Water	625.1 SIM	632763
LCS 570-632763/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	632763
LCSD 570-632763/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	632763
380-173388-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	632763
380-173388-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	632763

Analysis Batch: 637854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	632763
MB 570-632763/1-A	Method Blank	Total/NA	Water	625.1	632763

GC VOA

Analysis Batch: 635834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
380-173380-2	TB: HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
MB 570-635834/11	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-635834/1009	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-635834/10	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-635834/1004	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-173388-B-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-173388-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-173380-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC Semi VOA

Prep Batch: 632540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1 - RA	HALAWA SHAFT VIEWING POOL	Total/NA	Water	3510C	
MB 570-632540/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-632540/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-632540/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-632540/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-173600-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-173600-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 635719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-632540/1-A	Method Blank	Total/NA	Water	8015B	632540
LCS 570-632540/2-A	Lab Control Sample	Total/NA	Water	8015B	632540
LCSD 570-632540/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	632540
380-173600-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	632540
380-173600-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	632540

Analysis Batch: 636470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-173380-1 - RA	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B	632540
MRL 570-632540/4-A	Lab Control Sample	Total/NA	Water	8015B	632540



Lab Chronicle

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

Job ID: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-1

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			176654	KRD3	EA POM	09/28/25 10:14
Total/NA	Analysis	525.2		1	176868	UPAC	EA POM	09/29/25 16:50
Total/NA	Prep	625.1			632763	S4EA	EET CAL 4	09/29/25 13:23
Total/NA	Analysis	625.1		1	637854	J7WE	EET CAL 4	10/09/25 13:55
Total/NA	Prep	625.1			632763	S4EA	EET CAL 4	09/29/25 13:23
Total/NA	Analysis	625.1 SIM		1	636543	PQS1	EET CAL 4	10/07/25 15:55
Total/NA	Analysis	8015B GRO LL		1	635834	YD9V	EET CAL 4	10/05/25 20:11
Total/NA	Prep	3510C	RA		632540	TVD6	EET CAL 4	09/29/25 09:55
Total/NA	Analysis	8015B	RA	1	636470	H6FE	EET CAL 4	10/07/25 05:29

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-173380-2

Date Collected: 09/23/25 09:30

Matrix: Water

Date Received: 09/25/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	635834	YD9V	EET CAL 4	10/05/25 23:52

Laboratory References:

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

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

Accreditation/Certification Summary

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

Job ID: 380-173380-1
 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: 380-173380-1
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: 380-173380-1
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: 380-173380-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-173380-1	HALAWA SHAFT VIEWING POOL	Water	09/23/25 09:30	09/25/25 10:05	Hawaii
380-173380-2	TB: HALAWA SHAFT VIEWING POOL	Water	09/23/25 09:30	09/25/25 10:05	Hawaii

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Chain of Custody Record

Client Information		Lab PM: Arada, Rachelle		Carrier Tracking No(s): 380-28005-2757 1	
Sampler: Jason Rakofsky		E-Mail: Rachelle.Arada@et.eurofins.com		Page: Page 1 of 2	
Phone: +1 808 748 5840		PWSID:		Job #:	
Company: City & County of Honolulu		Due Date Requested:		Preservation Codes:	
Address: 630 South Beretania Street Chemistry Lab		TAT Requested (days):		R - NaThioSO4	
City: Honolulu		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		RA - NaThioHCl	
State Zip: HI, 96843		PO #: C20525101 exp 06312023		Q - Na2SO3	
Phone: 808-748-5840 (Tel)		Project #: 38001111		QA - Na2SO3/HCl	
Email: kiwamoto@hbws.org		SSOW#:		Y - Trizma	
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill		Sample Date		I - NH4 Acetate	
Site: Hawaii		Sample Time		Other:	
		Sample Type (C=Comp, G=grab)		Total Number of Containers	
		Preservation Code		Special Instructions/Note:	
Halawa Shaft Viewing Pool		23-Sep-2025 0930		R 2 3 2 2	
TB: Halawa Shaft Viewing Pool		23-Sep-2025		815B_DR0_LL_CS - HNL Ranger C10-C24/C24-C36/C8-C18	
				815B_GRO_LL - (MOD) GRO	
				826.1, 826.1_SIM	
				826.2_PREC - (MOD) 826plus Plus Tics	
				837 1_DW_PREC - 837.1 Full List	
				833 - All Analytes	
				Perform MS/MSD (Yes or No)	
				Field Filtered Sample (Yes or No)	
				Matrix (Water, Spill, Other/Col, etc - Trace, Analy)	
				Sample Date	
				Sample Time	
				Sample Type	
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Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-173380-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 173380

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: 380-173380-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 173380

List Number: 2

Creator: Cortez Diaz, Antonio

List Source: Eurofins Calscience

List Creation: 09/26/25 03:46 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	Not present
Sample custody seals, if present, are intact.	N/A	Not Present
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	2.5
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?	False	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	