

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool
RUSH Weekly Red Hill

JOB NUMBER

380-172188-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



Authorized for release by
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Definitions/Glossary

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA TICs

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

GC Semi VOA

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

Glossary

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

Case Narrative

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

Job ID: 380-172188-1

Job ID: 380-172188-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-172188-1

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 9/18/2025 10:04 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.5°C, 4.5°C and 4.7°C.

GC/MS Semi VOA

Method 625.1_SIM: The laboratory control sample (LCS) for preparation batch 570-627171 and analytical batch 570-630004 recovered outside control limits for the following analytes: Fluorene and Pyrene.

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: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)
PWSID Number: HI0000331

Lab Sample ID: 380-172188-1

No Detections.

Client Sample ID: TB: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-2

No Detections.

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

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: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-1

Date Collected: 09/16/25 09:36

Matrix: Drinking Water

Date Received: 09/18/25 10:04

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2,4'-DDD	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2,4'-DDE	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2,4'-DDT	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
2-Methylnaphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
4,4'-DDD	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
4,4'-DDE	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
4,4'-DDT	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Acenaphthene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Acenaphthylene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Acetochlor	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Alachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
alpha-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
alpha-Chlordane	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Anthracene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 16:11	1
Atrazine	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Benz(a)anthracene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Benzo[a]pyrene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 16:11	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 16:11	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 16:11	1
beta-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		09/22/25 14:55	09/23/25 16:11	1
Bromacil	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Butachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Butylbenzylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 16:11	1
Chlorobenzilate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Chloroneb	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Chlorpyrifos	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Chrysene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 16:11	1
delta-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		09/22/25 14:55	09/23/25 16:11	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Dieldrin	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Diethylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 16:11	1
Dimethylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 16:11	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		09/22/25 14:55	09/23/25 16:11	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Endosulfan sulfate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Endrin	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Endrin aldehyde	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
EPTC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Fluoranthene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1

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Client Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-1

Date Collected: 09/16/25 09:36

Matrix: Drinking Water

Date Received: 09/18/25 10:04

PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
gamma-Chlordane	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Heptachlor	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Hexachlorobenzene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Isophorone	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Lindane	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Malathion	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Methoxychlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Metolachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Molinate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Naphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Parathion	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Phenanthrene	<0.039		0.039	ug/L		09/22/25 14:55	09/23/25 16:11	1
Propachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Pyrene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Simazine	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Terbacil	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Terbutylazine	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Thiobencarb	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		09/22/25 14:55	09/23/25 16:11	1
trans-Nonachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 16:11	1
Trifluralin	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 16:11	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	09/22/25 14:55	09/23/25 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	101		70 - 130	09/22/25 14:55	09/23/25 16:11	1
Perylene-d12	89		70 - 130	09/22/25 14:55	09/23/25 16:11	1
Triphenylphosphate	98		70 - 130	09/22/25 14:55	09/23/25 16:11	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		09/19/25 04:51	09/29/25 11:36	1
2-Methylnaphthalene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Acenaphthene	<0.19	*	0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Acenaphthylene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Anthracene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Benzo[a]anthracene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Benzo[a]pyrene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Chrysene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Fluoranthene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-1

Date Collected: 09/16/25 09:36

Matrix: Drinking Water

Date Received: 09/18/25 10:04

PWSID Number: HI0000331

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		09/19/25 04:51	09/29/25 11:36	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Naphthalene	<0.19		0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Phenanthrene	<0.19	*-	0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1
Pyrene	<0.19	*-	0.19	ug/L		09/19/25 04:51	09/29/25 11:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	57		28 - 127	09/19/25 04:51	09/29/25 11:36	1
2-Fluorobiphenyl (Surr)	51		31 - 120	09/19/25 04:51	09/29/25 11:36	1
2-Fluorophenol (Surr)	33		17 - 120	09/19/25 04:51	09/29/25 11:36	1
Nitrobenzene-d5 (Surr)	51		27 - 120	09/19/25 04:51	09/29/25 11:36	1
Phenol-d6 (Surr)	21		10 - 120	09/19/25 04:51	09/29/25 11:36	1
p-Terphenyl-d14 (Surr)	64		45 - 120	09/19/25 04:51	09/29/25 11:36	1

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

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	11	T J	ug/L		6.90	N/A	09/19/25 04:51	10/08/25 16:46	1
Cyclic octaatomic sulfur	21	T J N	ug/L		9.93	10544-50-0	09/19/25 04:51	10/08/25 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	57		33 - 139	09/19/25 04:51	10/08/25 16:46	1
2-Fluorobiphenyl (Surr)	55		33 - 126	09/19/25 04:51	10/08/25 16:46	1
2-Fluorophenol (Surr)	32		12 - 120	09/19/25 04:51	10/08/25 16:46	1
Nitrobenzene-d5 (Surr)	54		36 - 120	09/19/25 04:51	10/08/25 16:46	1
Phenol-d6 (Surr)	21		10 - 120	09/19/25 04:51	10/08/25 16:46	1
p-Terphenyl-d14 (Surr)	67		47 - 131	09/19/25 04:51	10/08/25 16:46	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			09/22/25 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		38 - 134		09/22/25 14:55	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		09/20/25 10:16	09/29/25 05:55	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/20/25 10:16	09/29/25 05:55	1
C8-C18	<25		25	ug/L		09/20/25 10:16	09/29/25 05:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	67		60 - 130	09/20/25 10:16	09/29/25 05:55	1

Client Sample ID: TB: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-2

Date Collected: 09/16/25 09:36

Matrix: Water

Date Received: 09/18/25 10:04

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			09/22/25 18:17	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-2

Date Collected: 09/16/25 09:36

Matrix: Water

Date Received: 09/18/25 10:04

<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)	97		38 - 134		09/22/25 18:17	1

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Action Limit Summary

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-1

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		ug/L	0.2	0.020	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.59		ug/L	6	0.59	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.59		ug/L	400	0.59	525.2	Total/NA
Endrin	<0.0098		ug/L	2	0.0098	525.2	Total/NA
Heptachlor	<0.0098		ug/L	0.4	0.0098	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Hexachlorobenzene	<0.049		ug/L	1	0.049	525.2	Total/NA
Hexachlorocyclopentadiene	<0.049		ug/L	50	0.049	525.2	Total/NA
Lindane	<0.0098		ug/L	0.2	0.0098	525.2	Total/NA
Methoxychlor	<0.049		ug/L	40	0.049	525.2	Total/NA
Simazine	<0.049		ug/L	4	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Matrix: Drinking 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)
380-172188-1	HALAWA SHAFT (331-241-TP4)	101	89	98
380-172188-1 DU	HALAWA SHAFT (331-241-TP401)	100	91	99

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

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)
380-172144-C-2-A MS	Matrix Spike	99	95	103
LCS 380-175578/22-A	Lab Control Sample	99	94	105
MB 380-175578/20-A	Method Blank	101	86	103
MRL 380-175578/21-A	Lab Control Sample	101	92	101

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

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

Matrix: Drinking 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)
380-172188-1	HALAWA SHAFT (331-241-TP4)	57	55	32	54	21	67

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: Drinking 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)
380-172188-1	HALAWA SHAFT (331-241-TP4)	57	51	33	51	21	64

Surrogate Legend
 TBP = 2,4,6-Tribromophenol (Surr)
 FBP = 2-Fluorobiphenyl (Surr)
 2FP = 2-Fluorophenol (Surr)

Surrogate Summary

Client: City & County of Honolulu

Job ID: 380-172188-1

Project/Site: RED-HILL

SDG: Weekly: Halawa Shaft Viewing Pool

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)
380-171895-A-1-A MS	Matrix Spike	79	74	54	65	36	76
380-171895-A-1-B MSD	Matrix Spike Duplicate	86	80	61	70	42	83
LCS 570-627171/2-A	Lab Control Sample	66	60	48	57	34	64
LCSD 570-627171/3-A	Lab Control Sample Dup	71	68	54	60	38	72
MB 570-627171/1-A	Method Blank	85	71	53	80	34	78

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL6 = Phenol-d6 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-172188-1	HALAWA SHAFT (331-241-TP4)	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-171895-C-1 MS	Matrix Spike	97
380-171895-C-1 MSD	Matrix Spike Duplicate	95
380-172188-2	TB: HALAWA SHAFT (331-241-TP401)	97
LCS 570-628809/4	Lab Control Sample	94
LCSD 570-628809/5	Lab Control Sample Dup	91
MB 570-628809/6	Method Blank	97
MRL 570-628809/3	Lab Control Sample	88

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		OTCSN1 (60-130)
380-172188-1	HALAWA SHAFT (331-241-TP4)	67

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Surrogate Summary

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Surrogate Legend

OTCSN = n-Octacosane (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)
380-171895-B-1-A MS	Matrix Spike	96
380-171895-B-1-B MSD	Matrix Spike Duplicate	94
LCS 570-628483/2-A	Lab Control Sample	96
LCSD 570-628483/3-A	Lab Control Sample Dup	94
MB 570-628483/1-A	Method Blank	88
MRL 570-628483/4-A	Lab Control Sample	82

Surrogate Legend

OTCSN = n-Octacosane (Surr)

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-175578/20-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 175578

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2,4'-DDD	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2,4'-DDE	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2,4'-DDT	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
2-Methylnaphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
4,4'-DDD	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
4,4'-DDE	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
4,4'-DDT	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Acenaphthene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Acenaphthylene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Acetochlor	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Alachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
alpha-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
alpha-Chlordane	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Anthracene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 15:30	1
Atrazine	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Benz(a)anthracene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Benzo[a]pyrene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 15:30	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 15:30	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 15:30	1
beta-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		09/22/25 14:55	09/23/25 15:30	1
Bromacil	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Butachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Butylbenzylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 15:30	1
Chlorobenzilate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Chloroneb	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Chlorpyrifos	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Chrysene	<0.020		0.020	ug/L		09/22/25 14:55	09/23/25 15:30	1
delta-BHC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		09/22/25 14:55	09/23/25 15:30	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Dieldrin	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Diethylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 15:30	1
Dimethylphthalate	<0.49		0.49	ug/L		09/22/25 14:55	09/23/25 15:30	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		09/22/25 14:55	09/23/25 15:30	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Endosulfan sulfate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Endrin	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Endrin aldehyde	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
EPTC	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-175578/20-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 175578

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Fluorene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
gamma-Chlordane	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Heptachlor	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Hexachlorobenzene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Isophorone	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Lindane	<0.0098		0.0098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Malathion	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Methoxychlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Metolachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Molinate	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Naphthalene	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Parathion	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Phenanthrene	<0.039		0.039	ug/L		09/22/25 14:55	09/23/25 15:30	1
Propachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Pyrene	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Simazine	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Terbacil	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Terbutylazine	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Thiobencarb	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		09/22/25 14:55	09/23/25 15:30	1
trans-Nonachlor	<0.049		0.049	ug/L		09/22/25 14:55	09/23/25 15:30	1
Trifluralin	<0.098		0.098	ug/L		09/22/25 14:55	09/23/25 15:30	1

<i>Tentatively Identified Compound</i>	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
<i>Decane</i>	2.41	T J N	ug/L		2.68	124-18-5	09/22/25 14:55	09/23/25 15:30	1
<i>Cyclopentasiloxane, decamethyl-</i>	0.546	T J N	ug/L		3.16	541-02-6	09/22/25 14:55	09/23/25 15:30	1
<i>Cyclohexasiloxane, dodecamethyl-</i>	0.635	T J N	ug/L		3.77	540-97-6	09/22/25 14:55	09/23/25 15:30	1
<i>9-Octadecenamamide, (Z)-</i>	1.05	T J N	ug/L		7.72	301-02-0	09/22/25 14:55	09/23/25 15:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>2-Nitro-m-xylene</i>	101		70 - 130	09/22/25 14:55	09/23/25 15:30	1
<i>Perylene-d12</i>	86		70 - 130	09/22/25 14:55	09/23/25 15:30	1
<i>Triphenylphosphate</i>	103		70 - 130	09/22/25 14:55	09/23/25 15:30	1

Lab Sample ID: LCS 380-175578/22-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	1.96	1.85		ug/L		94	70 - 130
2,4'-DDD	1.96	2.04		ug/L		104	70 - 130
2,4'-DDE	1.96	1.99		ug/L		101	70 - 130
2,4'-DDT	1.96	1.95		ug/L		99	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-172188-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-175578/22-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1.96	2.02		ug/L		103	70 - 130
2,6-Dinitrotoluene	1.96	2.03		ug/L		104	70 - 130
2-Methylnaphthalene	1.96	1.99		ug/L		101	70 - 130
4,4'-DDD	1.96	2.17		ug/L		111	70 - 130
4,4'-DDE	1.96	2.03		ug/L		103	70 - 130
4,4'-DDT	1.96	2.03		ug/L		103	70 - 130
Acenaphthene	1.96	2.05		ug/L		104	70 - 130
Acenaphthylene	1.96	2.08		ug/L		106	70 - 130
Acetochlor	1.96	2.17		ug/L		111	70 - 130
Alachlor	1.96	2.17		ug/L		111	70 - 130
alpha-BHC	1.96	2.02		ug/L		103	70 - 130
alpha-Chlordane	1.96	2.13		ug/L		108	70 - 130
Anthracene	1.96	1.95		ug/L		99	70 - 130
Atrazine	1.96	2.13		ug/L		109	70 - 130
Benz(a)anthracene	1.96	1.97		ug/L		100	70 - 130
Benzo[a]pyrene	1.96	1.91		ug/L		97	70 - 130
Benzo[b]fluoranthene	1.96	2.04		ug/L		104	70 - 130
Benzo[g,h,i]perylene	1.96	1.93		ug/L		98	70 - 130
Benzo[k]fluoranthene	1.96	1.95		ug/L		99	70 - 130
beta-BHC	1.96	2.05		ug/L		104	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	2.00		ug/L		102	70 - 130
Bromacil	1.96	2.06		ug/L		105	70 - 130
Butachlor	1.96	2.14		ug/L		109	70 - 130
Butylbenzylphthalate	1.96	2.22		ug/L		113	70 - 130
Chlorobenzilate	1.96	2.06		ug/L		105	70 - 130
Chloroneb	1.96	2.06		ug/L		105	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	2.03		ug/L		103	70 - 130
Chlorpyrifos	1.96	2.14		ug/L		109	70 - 130
Chrysene	1.96	1.95		ug/L		99	70 - 130
delta-BHC	1.96	2.05		ug/L		104	70 - 130
Di(2-ethylhexyl)adipate	1.96	2.15		ug/L		110	70 - 130
Dibenz(a,h)anthracene	1.96	1.98		ug/L		101	70 - 130
Diclorvos (DDVP)	1.96	2.38		ug/L		121	70 - 130
Dieldrin	1.96	2.09		ug/L		106	70 - 130
Diethylphthalate	1.96	2.17		ug/L		111	70 - 130
Dimethylphthalate	1.96	2.16		ug/L		110	70 - 130
Di-n-butyl phthalate	3.93	4.43		ug/L		113	70 - 130
Di-n-octyl phthalate	1.96	2.01		ug/L		102	70 - 130
Endosulfan I (Alpha)	1.96	2.01		ug/L		102	70 - 130
Endosulfan II (Beta)	1.96	1.99		ug/L		101	70 - 130
Endosulfan sulfate	1.96	1.94		ug/L		99	70 - 130
Endrin	1.96	2.21		ug/L		112	70 - 130
Endrin aldehyde	1.96	1.90		ug/L		97	60 - 130
EPTC	1.96	2.13		ug/L		109	70 - 130
Fluoranthene	1.96	2.10		ug/L		107	70 - 130
Fluorene	1.96	2.09		ug/L		107	70 - 130
gamma-Chlordane	1.96	2.03		ug/L		104	70 - 130
Heptachlor	1.96	2.18		ug/L		111	70 - 130
Heptachlor epoxide (isomer B)	1.96	2.12		ug/L		108	70 - 130

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-175578/22-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobenzene	1.96	1.97		ug/L		100	70 - 130
Hexachlorocyclopentadiene	1.96	2.09		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	1.96	1.97		ug/L		100	70 - 130
Isophorone	1.96	2.06		ug/L		105	70 - 130
Lindane	1.96	2.09		ug/L		107	70 - 130
Malathion	1.96	2.07		ug/L		105	70 - 130
Methoxychlor	1.96	2.13		ug/L		108	70 - 130
Metolachlor	1.96	2.13		ug/L		109	70 - 130
Molinate	1.96	2.17		ug/L		111	70 - 130
Naphthalene	1.96	2.18		ug/L		111	70 - 130
Parathion	1.96	2.11		ug/L		107	70 - 130
Pendimethalin (Penoxaline)	1.96	1.98		ug/L		101	70 - 130
Phenanthrene	1.96	1.98		ug/L		101	70 - 130
Propachlor	1.96	2.22		ug/L		113	70 - 130
Pyrene	1.96	2.13		ug/L		109	70 - 130
Simazine	1.96	2.33		ug/L		119	70 - 130
Terbacil	1.96	2.10		ug/L		107	70 - 130
Terbutylazine	1.96	2.21		ug/L		113	70 - 130
Thiobencarb	1.96	2.24		ug/L		114	70 - 130
trans-Nonachlor	1.96	2.06		ug/L		105	70 - 130
Trifluralin	1.96	1.94		ug/L		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	105		70 - 130

Lab Sample ID: MRL 380-175578/21-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0983	0.106		ug/L		107	50 - 150
2,4'-DDD	0.0983	0.0806	J	ug/L		82	50 - 150
2,4'-DDE	0.0983	0.0927	J	ug/L		94	50 - 150
2,4'-DDT	0.0983	0.106		ug/L		108	50 - 150
2,4-Dinitrotoluene	0.0983	0.105		ug/L		107	50 - 150
2,6-Dinitrotoluene	0.0983	0.107		ug/L		109	50 - 150
2-Methylnaphthalene	0.0983	0.104		ug/L		106	50 - 150
4,4'-DDD	0.0983	0.0938	J	ug/L		95	50 - 150
4,4'-DDE	0.0983	0.0862	J	ug/L		88	50 - 150
4,4'-DDT	0.0983	0.117		ug/L		119	50 - 150
Acenaphthene	0.0983	0.0970	J	ug/L		99	50 - 150
Acenaphthylene	0.0983	0.0856	J	ug/L		87	50 - 150
Acetochlor	0.0983	0.101		ug/L		103	50 - 150
Alachlor	0.0491	0.0496		ug/L		101	50 - 150
alpha-BHC	0.0983	0.0935	J	ug/L		95	50 - 150
alpha-Chlordane	0.0246	<0.029		ug/L		97	50 - 150

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-175578/21-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Anthracene	0.0197	0.0202		ug/L		103	50 - 150
Atrazine	0.0491	0.0553		ug/L		112	50 - 150
Benz(a)anthracene	0.0491	0.0472	J	ug/L		96	50 - 150
Benzo[a]pyrene	0.0197	0.0188	J	ug/L		96	50 - 150
Benzo[b]fluoranthene	0.0197	0.0212		ug/L		108	50 - 150
Benzo[g,h,i]perylene	0.0491	0.0473	J	ug/L		96	50 - 150
Benzo[k]fluoranthene	0.0197	0.0215		ug/L		110	50 - 150
beta-BHC	0.0983	0.104		ug/L		106	50 - 150
Bis(2-ethylhexyl) phthalate	0.590	0.562	J	ug/L		95	50 - 150
Bromacil	0.0983	0.114		ug/L		116	50 - 150
Butachlor	0.0491	0.0595		ug/L		121	50 - 150
Butylbenzylphthalate	0.491	0.546		ug/L		111	50 - 150
Chlorobenzilate	0.0983	0.111		ug/L		113	50 - 150
Chloroneb	0.0983	0.0973	J	ug/L		99	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0983	0.0952	J	ug/L		97	50 - 150
Chlorpyrifos	0.0491	0.0471	J	ug/L		96	50 - 150
Chrysene	0.0197	0.0204		ug/L		104	50 - 150
delta-BHC	0.0983	0.0980		ug/L		100	50 - 150
Di(2-ethylhexyl)adipate	0.590	0.628		ug/L		106	50 - 150
Dibenz(a,h)anthracene	0.0491	0.0463	J	ug/L		94	50 - 150
Diclorvos (DDVP)	0.0491	0.0585		ug/L		119	50 - 150
Dieldrin	0.00983	0.0104		ug/L		106	50 - 150
Diethylphthalate	0.491	0.519		ug/L		106	50 - 150
Dimethylphthalate	0.491	0.522		ug/L		106	50 - 150
Di-n-butyl phthalate	0.491	0.540	J	ug/L		110	49 - 243
Di-n-octyl phthalate	0.0983	0.0940	J	ug/L		96	50 - 150
Endosulfan I (Alpha)	0.0983	0.0946	J	ug/L		96	50 - 150
Endosulfan II (Beta)	0.0983	0.0864	J	ug/L		88	50 - 150
Endosulfan sulfate	0.0983	0.105		ug/L		107	50 - 150
Endrin	0.00983	0.00841	J	ug/L		86	50 - 150
Endrin aldehyde	0.0983	0.113		ug/L		115	50 - 150
EPTC	0.0983	0.0998		ug/L		102	50 - 150
Fluoranthene	0.0983	0.0927	J	ug/L		94	50 - 150
Fluorene	0.0491	<0.049		ug/L		95	50 - 150
gamma-Chlordane	0.0246	0.0222	J	ug/L		90	50 - 150
Heptachlor	0.00983	0.0109		ug/L		111	50 - 150
Heptachlor epoxide (isomer B)	0.00983	0.0114		ug/L		116	50 - 150
Hexachlorobenzene	0.0491	0.0477	J	ug/L		97	50 - 150
Hexachlorocyclopentadiene	0.0491	0.0555		ug/L		113	50 - 150
Indeno[1,2,3-cd]pyrene	0.0491	0.0458	J	ug/L		93	50 - 150
Isophorone	0.0983	0.111		ug/L		113	50 - 150
Lindane	0.00983	0.0101		ug/L		103	50 - 150
Malathion	0.0983	0.107		ug/L		108	50 - 150
Methoxychlor	0.0491	0.0548		ug/L		112	50 - 150
Metolachlor	0.0491	0.0565		ug/L		115	50 - 150
Molinate	0.0983	0.0990		ug/L		101	50 - 150
Naphthalene	0.0983	0.102		ug/L		104	50 - 150
Parathion	0.0983	0.0953	J	ug/L		97	50 - 150
Pendimethalin (Penoxaline)	0.0983	0.104		ug/L		106	50 - 150

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-175578/21-A
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	0.0393	0.0418		ug/L		106	50 - 150
Propachlor	0.0491	0.0518		ug/L		105	50 - 150
Pyrene	0.0491	0.0465	J	ug/L		95	50 - 150
Simazine	0.0491	0.0407	J	ug/L		83	50 - 150
Terbacil	0.0983	0.117		ug/L		119	50 - 150
Terbutylazine	0.0983	0.0996		ug/L		101	50 - 150
Thiobencarb	0.0983	0.0957	J	ug/L		97	50 - 150
trans-Nonachlor	0.0246	<0.026		ug/L		88	50 - 150
Trifluralin	0.0983	0.104		ug/L		105	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	101		70 - 130
Perylene-d12	92		70 - 130
Triphenylphosphate	101		70 - 130

Lab Sample ID: 380-172144-C-2-A MS
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.099		1.97	1.83		ug/L		92	70 - 130
2,4'-DDD	<0.099		1.97	2.06		ug/L		104	70 - 130
2,4'-DDE	<0.099		1.97	2.06		ug/L		105	70 - 130
2,4'-DDT	<0.099		1.97	2.02		ug/L		103	70 - 130
2,4-Dinitrotoluene	<0.099		1.97	2.07		ug/L		105	70 - 130
2,6-Dinitrotoluene	<0.099		1.97	2.07		ug/L		105	70 - 130
2-Methylnaphthalene	<0.099		1.97	1.99		ug/L		101	70 - 130
4,4'-DDD	<0.099		1.97	2.18		ug/L		111	70 - 130
4,4'-DDE	<0.099		1.97	2.08		ug/L		105	70 - 130
4,4'-DDT	<0.099		1.97	2.08		ug/L		106	70 - 130
Acenaphthene	<0.099		1.97	2.01		ug/L		102	70 - 130
Acenaphthylene	<0.099		1.97	1.96		ug/L		100	70 - 130
Acetochlor	<0.099		1.97	2.18		ug/L		110	70 - 130
Alachlor	<0.049		1.97	2.19		ug/L		111	70 - 130
alpha-BHC	<0.099		1.97	2.01		ug/L		102	70 - 130
alpha-Chlordane	<0.049		1.97	2.19		ug/L		111	70 - 130
Anthracene	<0.020	F1	1.97	1.13	F1	ug/L		57	70 - 130
Atrazine	<0.049		1.97	2.09		ug/L		106	70 - 130
Benz(a)anthracene	<0.049		1.97	1.89		ug/L		96	70 - 130
Benzo[a]pyrene	<0.020		1.97	1.73		ug/L		88	70 - 130
Benzo[b]fluoranthene	<0.020		1.97	2.03		ug/L		103	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	2.00		ug/L		102	70 - 130
Benzo[k]fluoranthene	<0.020		1.97	2.04		ug/L		103	70 - 130
beta-BHC	<0.099		1.97	2.05		ug/L		104	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.97	2.07		ug/L		105	70 - 130
Bromacil	<0.099		1.97	2.10		ug/L		107	70 - 130
Butachlor	<0.049		1.97	2.14		ug/L		108	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.18		ug/L		111	70 - 130

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-172144-C-2-A MS
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzilate	<0.099		1.97	2.08		ug/L		106	70 - 130
Chloroneb	<0.099		1.97	2.03		ug/L		103	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.97	2.02		ug/L		103	70 - 130
Chlorpyrifos	<0.049		1.97	2.15		ug/L		109	70 - 130
Chrysene	<0.020		1.97	1.97		ug/L		100	70 - 130
delta-BHC	<0.099		1.97	2.05		ug/L		104	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.97	2.17		ug/L		110	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	2.04		ug/L		104	70 - 130
Diclorvos (DDVP)	<0.049		1.97	2.29		ug/L		116	70 - 130
Dieldrin	<0.0099		1.97	2.16		ug/L		110	70 - 130
Diethylphthalate	<0.49		1.97	2.14		ug/L		109	70 - 130
Dimethylphthalate	<0.49		1.97	2.15		ug/L		109	70 - 130
Di-n-butyl phthalate	<0.99		3.94	4.39		ug/L		112	70 - 130
Di-n-octyl phthalate	<0.099		1.97	2.10		ug/L		107	70 - 130
Endosulfan I (Alpha)	<0.099		1.97	2.03		ug/L		103	70 - 130
Endosulfan II (Beta)	<0.099		1.97	2.05		ug/L		104	70 - 130
Endosulfan sulfate	<0.099		1.97	1.92		ug/L		98	70 - 130
Endrin	<0.0099		1.97	2.30		ug/L		117	70 - 130
Endrin aldehyde	<0.099		1.97	1.80		ug/L		91	60 - 130
EPTC	<0.099		1.97	2.11		ug/L		107	70 - 130
Fluoranthene	<0.099		1.97	2.11		ug/L		107	70 - 130
Fluorene	<0.049		1.97	2.06		ug/L		105	70 - 130
gamma-Chlordane	<0.049		1.97	2.10		ug/L		107	70 - 130
Heptachlor	<0.0099		1.97	2.27		ug/L		115	70 - 130
Heptachlor epoxide (isomer B)	<0.0099		1.97	2.19		ug/L		111	70 - 130
Hexachlorobenzene	<0.049		1.97	1.96		ug/L		100	70 - 130
Hexachlorocyclopentadiene	<0.049		1.97	2.11		ug/L		107	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.97	2.07		ug/L		105	70 - 130
Isophorone	<0.099		1.97	2.04		ug/L		104	70 - 130
Lindane	<0.0099		1.97	2.04		ug/L		104	70 - 130
Malathion	<0.099		1.97	2.05		ug/L		104	70 - 130
Methoxychlor	<0.049		1.97	2.11		ug/L		107	70 - 130
Metolachlor	<0.049		1.97	2.15		ug/L		109	70 - 130
Molinate	<0.099		1.97	2.13		ug/L		108	70 - 130
Naphthalene	<0.099		1.97	2.20		ug/L		112	70 - 130
Parathion	<0.099		1.97	2.09		ug/L		106	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.97	2.04		ug/L		104	70 - 130
Phenanthrene	<0.040		1.97	1.98		ug/L		100	70 - 130
Propachlor	<0.049		1.97	2.20		ug/L		112	70 - 130
Pyrene	<0.049		1.97	2.14		ug/L		108	70 - 130
Simazine	<0.049		1.97	2.32		ug/L		118	70 - 130
Terbacil	<0.099		1.97	2.08		ug/L		106	70 - 130
Terbutylazine	<0.099		1.97	2.16		ug/L		110	70 - 130
Thiobencarb	<0.099		1.97	2.22		ug/L		113	70 - 130
trans-Nonachlor	<0.049		1.97	2.16		ug/L		110	70 - 130
Trifluralin	<0.099		1.97	1.97		ug/L		100	70 - 130

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-172144-C-2-A MS
Matrix: Water
Analysis Batch: 175769

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 175578

<i>Surrogate</i>	<i>%Recovery</i>	<i>MS MS Qualifier</i>	<i>Limits</i>
2-Nitro-m-xylene	99		70 - 130
Perylene-d12	95		70 - 130
Triphenylphosphate	103		70 - 130

Lab Sample ID: 380-172188-1 DU
Matrix: Drinking Water
Analysis Batch: 175769

Client Sample ID: HALAWA SHAFT (331-241-TP401)
Prep Type: Total/NA
Prep Batch: 175578

Analyte	Sample Result	Sample Qualifier	DU		Unit	D	RPD	Limit
			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	<0.0098		<0.0098		ug/L		NC	20
Diethylphthalate	<0.49		<0.49		ug/L		NC	20

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-172188-1 DU
Matrix: Drinking Water
Analysis Batch: 175769

Client Sample ID: HALAWA SHAFT (331-241-TP401)
Prep Type: Total/NA
Prep Batch: 175578

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)	<0.0098		<0.0098		ug/L		NC	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		<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		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	100		70 - 130
Perylene-d12	91		70 - 130
Triphenylphosphate	99		70 - 130

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-627171/1-A
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 627171

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
2-Methylnaphthalene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Acenaphthene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Acenaphthylene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Anthracene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Benzo[a]anthracene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Benzo[a]pyrene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Chrysene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Fluoranthene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Fluorene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Naphthalene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Phenanthrene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1
Pyrene	<0.20		0.20	ug/L		09/18/25 04:51	09/23/25 22:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	85		28 - 127	09/18/25 04:51	09/23/25 22:58	1
2-Fluorobiphenyl (Surr)	71		31 - 120	09/18/25 04:51	09/23/25 22:58	1
2-Fluorophenol (Surr)	53		17 - 120	09/18/25 04:51	09/23/25 22:58	1
Nitrobenzene-d5 (Surr)	80		27 - 120	09/18/25 04:51	09/23/25 22:58	1
Phenol-d6 (Surr)	34		10 - 120	09/18/25 04:51	09/23/25 22:58	1
p-Terphenyl-d14 (Surr)	78		45 - 120	09/18/25 04:51	09/23/25 22:58	1

Lab Sample ID: LCS 570-627171/2-A
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	11.9		ug/L		60	47 - 120
2-Methylnaphthalene	20.0	11.7		ug/L		59	43 - 120
Acenaphthene	20.0	13.2		ug/L		66	60 - 132
Acenaphthylene	20.0	13.3		ug/L		67	54 - 126
Anthracene	20.0	13.5		ug/L		68	43 - 120
Benzo[a]anthracene	20.0	13.0		ug/L		65	42 - 133
Benzo[a]pyrene	20.0	13.2		ug/L		66	32 - 148
Benzo[b]fluoranthene	20.0	13.5		ug/L		67	42 - 140
Benzo[g,h,i]perylene	20.0	14.1		ug/L		70	1 - 195
Benzo[k]fluoranthene	20.0	13.9		ug/L		70	25 - 146
Chrysene	20.0	13.9		ug/L		69	44 - 140
Dibenz(a,h)anthracene	20.0	13.7		ug/L		69	1 - 200
Fluoranthene	20.0	14.2		ug/L		71	43 - 121
Fluorene	20.0	13.7	*-	ug/L		69	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	12.9		ug/L		64	1 - 151
Naphthalene	20.0	11.6		ug/L		58	36 - 120

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-627171/2-A
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	13.6		ug/L		68	65 - 120
Pyrene	20.0	13.3	*-	ug/L		67	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	66		28 - 127
2-Fluorobiphenyl (Surr)	60		31 - 120
2-Fluorophenol (Surr)	48		17 - 120
Nitrobenzene-d5 (Surr)	57		27 - 120
Phenol-d6 (Surr)	34		10 - 120
p-Terphenyl-d14 (Surr)	64		45 - 120

Lab Sample ID: LCSD 570-627171/3-A
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	13.2		ug/L		66	47 - 120	10	20
2-Methylnaphthalene	20.0	13.0		ug/L		65	43 - 120	11	20
Acenaphthene	20.0	14.9		ug/L		75	60 - 132	13	29
Acenaphthylene	20.0	14.9		ug/L		75	54 - 126	11	45
Anthracene	20.0	15.0		ug/L		75	43 - 120	10	40
Benzo[a]anthracene	20.0	14.6		ug/L		73	42 - 133	12	32
Benzo[a]pyrene	20.0	14.7		ug/L		73	32 - 148	10	43
Benzo[b]fluoranthene	20.0	14.9		ug/L		74	42 - 140	10	43
Benzo[g,h,i]perylene	20.0	15.8		ug/L		79	1 - 195	11	61
Benzo[k]fluoranthene	20.0	15.7		ug/L		78	25 - 146	12	38
Chrysene	20.0	15.6		ug/L		78	44 - 140	12	53
Dibenz(a,h)anthracene	20.0	15.8		ug/L		79	1 - 200	14	75
Fluoranthene	20.0	15.7		ug/L		78	43 - 121	10	40
Fluorene	20.0	15.3		ug/L		76	70 - 120	11	23
Indeno[1,2,3-cd]pyrene	20.0	14.4		ug/L		72	1 - 151	11	60
Naphthalene	20.0	12.6		ug/L		63	36 - 120	8	39
Phenanthrene	20.0	15.2		ug/L		76	65 - 120	11	24
Pyrene	20.0	15.0		ug/L		75	70 - 120	12	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	71		28 - 127
2-Fluorobiphenyl (Surr)	68		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	60		27 - 120
Phenol-d6 (Surr)	38		10 - 120
p-Terphenyl-d14 (Surr)	72		45 - 120

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-171895-A-1-A MS
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.19		19.1	13.6		ug/L		71	36 - 120
2-Methylnaphthalene	<0.19		19.1	13.5		ug/L		71	32 - 124
Acenaphthene	<0.19		19.1	15.4		ug/L		81	47 - 145
Acenaphthylene	<0.19		19.1	15.4		ug/L		81	33 - 145
Anthracene	<0.19		19.1	15.6		ug/L		82	27 - 133
Benzo[a]anthracene	<0.19		19.1	15.1		ug/L		79	33 - 143
Benzo[a]pyrene	<0.19		19.1	15.1		ug/L		79	17 - 163
Benzo[b]fluoranthene	<0.19		19.1	15.2		ug/L		79	24 - 159
Benzo[g,h,i]perylene	<0.19		19.1	15.8		ug/L		83	1 - 219
Benzo[k]fluoranthene	<0.19		19.1	16.1		ug/L		84	11 - 162
Chrysene	<0.19		19.1	15.9		ug/L		83	17 - 168
Dibenz(a,h)anthracene	<0.19		19.1	15.7		ug/L		82	1 - 227
Fluoranthene	<0.19		19.1	16.4		ug/L		86	26 - 137
Fluorene	<0.19	*-	19.1	16.1		ug/L		84	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.1	14.6		ug/L		76	1 - 171
Naphthalene	<0.19		19.1	13.6		ug/L		71	21 - 133
Phenanthrene	<0.19		19.1	15.8		ug/L		83	54 - 120
Pyrene	<0.19	*-	19.1	15.7		ug/L		82	52 - 120

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	79		28 - 127
2-Fluorobiphenyl (Surr)	74		31 - 120
2-Fluorophenol (Surr)	54		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	76		45 - 120

Lab Sample ID: 380-171895-A-1-B MSD
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1-Methylnaphthalene	<0.19		19.2	14.8		ug/L		77	36 - 120	8	30
2-Methylnaphthalene	<0.19		19.2	14.4		ug/L		75	32 - 124	7	30
Acenaphthene	<0.19		19.2	16.7		ug/L		87	47 - 145	8	48
Acenaphthylene	<0.19		19.2	16.7		ug/L		87	33 - 145	8	74
Anthracene	<0.19		19.2	17.1		ug/L		89	27 - 133	9	66
Benzo[a]anthracene	<0.19		19.2	16.5		ug/L		86	33 - 143	9	53
Benzo[a]pyrene	<0.19		19.2	16.3		ug/L		85	17 - 163	8	72
Benzo[b]fluoranthene	<0.19		19.2	16.8		ug/L		88	24 - 159	10	71
Benzo[g,h,i]perylene	<0.19		19.2	17.5		ug/L		91	1 - 219	10	97
Benzo[k]fluoranthene	<0.19		19.2	17.1		ug/L		89	11 - 162	6	63
Chrysene	<0.19		19.2	17.4		ug/L		91	17 - 168	9	87
Dibenz(a,h)anthracene	<0.19		19.2	17.3		ug/L		90	1 - 227	10	126
Fluoranthene	<0.19		19.2	18.1		ug/L		95	26 - 137	10	66
Fluorene	<0.19	*-	19.2	17.4		ug/L		91	59 - 121	8	38
Indeno[1,2,3-cd]pyrene	<0.19		19.2	16.1		ug/L		84	1 - 171	10	99
Naphthalene	<0.19		19.2	13.9		ug/L		72	21 - 133	2	65

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-171895-A-1-B MSD
Matrix: Water
Analysis Batch: 630004

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 627171

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.2	17.4		ug/L		91	54 - 120	10	39
Pyrene	<0.19	*-	19.2	17.3		ug/L		90	52 - 120	10	49
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
2,4,6-Tribromophenol (Surr)	86		28 - 127								
2-Fluorobiphenyl (Surr)	80		31 - 120								
2-Fluorophenol (Surr)	61		17 - 120								
Nitrobenzene-d5 (Surr)	70		27 - 120								
Phenol-d6 (Surr)	42		10 - 120								
p-Terphenyl-d14 (Surr)	83		45 - 120								

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

Lab Sample ID: MB 570-628809/6
Matrix: Water
Analysis Batch: 628809

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
GRO (C6-C10)	<10		10	ug/L			09/22/25 11:06	1			
MB MB											
Surrogate	%Recovery	Qualifier	Limits						Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134						09/22/25 11:06	1	

Lab Sample ID: LCS 570-628809/4
Matrix: Water
Analysis Batch: 628809

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	444		ug/L		111	78 - 120
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
4-Bromofluorobenzene (Surr)	94		38 - 134				

Lab Sample ID: LCSD 570-628809/5
Matrix: Water
Analysis Batch: 628809

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	416		ug/L		104	78 - 120	6	10
LCSD LCSD									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	91		38 - 134						

QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 570-628809/3
Matrix: Water
Analysis Batch: 628809

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	10.0	14.6		ug/L		146	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		88					38 - 134

Lab Sample ID: 380-171895-C-1 MS
Matrix: Water
Analysis Batch: 628809

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	409		ug/L		102	68 - 122
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		97							38 - 134

Lab Sample ID: 380-171895-C-1 MSD
Matrix: Water
Analysis Batch: 628809

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	418		ug/L		104	68 - 122	2	18
Surrogate		MSD %Recovery		MSD Qualifier					Limits		
4-Bromofluorobenzene (Surr)		95							38 - 134		

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

Lab Sample ID: MB 570-628483/1-A
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 628483

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		09/20/25 10:15	09/29/25 01:39	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		09/20/25 10:15	09/29/25 01:39	1
C8-C18	<25		25	ug/L		09/20/25 10:15	09/29/25 01:39	1
Surrogate		MB %Recovery				Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)		88				09/20/25 10:15	09/29/25 01:39	1

Lab Sample ID: LCS 570-628483/2-A
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1820		ug/L		114	56 - 127

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QC Sample Results

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-628483/2-A
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628483

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>	96		60 - 130

Lab Sample ID: LCSD 570-628483/3-A
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 628483

	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	1600	1740		ug/L		109	56 - 127	4	23
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

Lab Sample ID: MRL 570-628483/4-A
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 628483

	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	0.0250	0.0228	J	mg/L		91	50 - 150		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>									

Lab Sample ID: 380-171895-B-1-A MS
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 628483

	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	<26		1640	1910		ug/L		116	70 - 130		
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											

Lab Sample ID: 380-171895-B-1-B MSD
Matrix: Water
Analysis Batch: 632398

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 628483

	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Analyte C10-C28	<26		1650	1890		ug/L		115	70 - 130	1	20
<i>Surrogate</i> <i>n-Octacosane (Surr)</i>											

QC Association Summary

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

Job ID: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 175578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	525.2	
MB 380-175578/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-175578/22-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-175578/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-172144-C-2-A MS	Matrix Spike	Total/NA	Water	525.2	
380-172188-1 DU	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	525.2	

Analysis Batch: 175769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	525.2	175578
MB 380-175578/20-A	Method Blank	Total/NA	Water	525.2	175578
LCS 380-175578/22-A	Lab Control Sample	Total/NA	Water	525.2	175578
MRL 380-175578/21-A	Lab Control Sample	Total/NA	Water	525.2	175578
380-172144-C-2-A MS	Matrix Spike	Total/NA	Water	525.2	175578
380-172188-1 DU	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	525.2	175578

Prep Batch: 627171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	625.1	
MB 570-627171/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-627171/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-627171/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-171895-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-171895-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 630004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-627171/1-A	Method Blank	Total/NA	Water	625.1 SIM	627171
LCS 570-627171/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	627171
LCSD 570-627171/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	627171
380-171895-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	627171
380-171895-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	627171

Analysis Batch: 632467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	625.1 SIM	627171

Analysis Batch: 637396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	625.1	627171

GC VOA

Analysis Batch: 628809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	8015B GRO LL	
380-172188-2	TB: HALAWA SHAFT (331-241-TP401)	Total/NA	Water	8015B GRO LL	
MB 570-628809/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-628809/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-628809/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-628809/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-172188-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC VOA (Continued)

Analysis Batch: 628809 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-171895-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-171895-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 628483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	3510C	
MB 570-628483/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-628483/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-628483/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-628483/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-171895-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-171895-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 632398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-172188-1	HALAWA SHAFT (331-241-TP401)	Total/NA	Drinking Water	8015B	628483
MB 570-628483/1-A	Method Blank	Total/NA	Water	8015B	628483
LCS 570-628483/2-A	Lab Control Sample	Total/NA	Water	8015B	628483
LCSD 570-628483/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	628483
MRL 570-628483/4-A	Lab Control Sample	Total/NA	Water	8015B	628483
380-171895-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	628483
380-171895-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	628483

Lab Chronicle

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

Job ID: 380-172188-1
 SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-1

Date Collected: 09/16/25 09:36

Matrix: Drinking Water

Date Received: 09/18/25 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			175578	IQ42	EA POM	09/22/25 14:55
Total/NA	Analysis	525.2		1	175769	Q8LA	EA POM	09/23/25 16:11
Total/NA	Prep	625.1			627171	H1SH	EET CAL 4	09/19/25 04:51
Total/NA	Analysis	625.1		1	637396	CG	EET CAL 4	10/08/25 16:46
Total/NA	Prep	625.1			627171	H1SH	EET CAL 4	09/19/25 04:51
Total/NA	Analysis	625.1 SIM		1	632467	PQS1	EET CAL 4	09/29/25 11:36
Total/NA	Analysis	8015B GRO LL		1	628809	YD9V	EET CAL 4	09/22/25 14:55
Total/NA	Prep	3510C			628483	TVD6	EET CAL 4	09/20/25 10:16
Total/NA	Analysis	8015B		1	632398	H6FE	EET CAL 4	09/29/25 05:55

Client Sample ID: TB: HALAWA SHAFT (331-241-TP401)

Lab Sample ID: 380-172188-2

Date Collected: 09/16/25 09:36

Matrix: Water

Date Received: 09/18/25 10:04

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	628809	YD9V	EET CAL 4	09/22/25 18:17

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: 380-172188-1
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
<p>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.</p>			
Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525.2	525.2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbutylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking 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: 380-172188-1
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: 380-172188-1
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: 380-172188-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-172188-1	HALAWA SHAFT (331-241-TP401)	Drinking Water	09/16/25 09:36	09/18/25 10:04	HI0000331
380-172188-2	TB: HALAWA SHAFT (331-241-TP401)	Water	09/16/25 09:36	09/18/25 10:04	

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Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-172188-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 172188

List Number: 1

Creator: Segura, Ryan

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").	True	
CIO4 headspace requirement met (>50% for CA, >30% for other states).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-172188-1
SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 172188

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 09/18/25 05:39 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	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	0.7
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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	