

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

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Erwin Kawata
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 310
Honolulu, Hawaii 96843

Generated 1/5/2026 11:53:27 AM

JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-187294-1

Eurofins 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 Drinking Water and Wastewater West, LLC Project Manager.

Compliance Statement

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

Authorization



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

Generated
1/5/2026 11:53:27 AM



Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Detection Summary	6
Client Sample Results	7
Action Limit Summary	11
Surrogate Summary	12
QC Sample Results	14
QC Association Summary	30
Lab Chronicle	32
Certification Summary	33
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	39

Definitions/Glossary

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS Semi VOA

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

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.

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: 380-187294-1

Job ID: 380-187294-1

Eurofins Pomona

Job Narrative 380-187294-1

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 12/11/2025 10:30 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 0.9°C.

GC/MS Semi VOA

Method 625.1: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-670488.

Method 625.1_SIM: The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-670488.

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 570-669844 and analytical batch 570-674105 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Pomona

Detection Summary

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

No Detections.

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-2

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.

Client Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

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		12/11/25 15:19	12/14/25 12:09	1
2,4'-DDD	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
2,4'-DDE	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
2,4'-DDT	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
2-Methylnaphthalene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
4,4'-DDD	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
4,4'-DDE	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
4,4'-DDT	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Acenaphthene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Acenaphthylene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Acetochlor	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Alachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
alpha-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
alpha-Chlordane	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Anthracene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 12:09	1
Atrazine	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Benz(a)anthracene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Benzo[a]pyrene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 12:09	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 12:09	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 12:09	1
beta-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		12/11/25 15:19	12/14/25 12:09	1
Bromacil	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Butachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Butylbenzylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 12:09	1
Chlorobenzilate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Chloroneb	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Chlorpyrifos	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Chrysene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 12:09	1
delta-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		12/11/25 15:19	12/14/25 12:09	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Dieldrin	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Diethylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 12:09	1
Dimethylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 12:09	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		12/11/25 15:19	12/14/25 12:09	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Endosulfan sulfate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Endrin	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Endrin aldehyde	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
EPTC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Fluoranthene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1

Client Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

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		12/11/25 15:19	12/14/25 12:09	1
gamma-Chlordane	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Heptachlor	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Hexachlorobenzene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Isophorone	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Lindane	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Malathion	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Methoxychlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Metolachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Molinate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Naphthalene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Parathion	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Phenanthrene	<0.039		0.039	ug/L		12/11/25 15:19	12/14/25 12:09	1
Propachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Pyrene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Simazine	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Terbacil	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Terbutylazine	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Thiobencarb	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		12/11/25 15:19	12/14/25 12:09	1
trans-Nonachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 12:09	1
Trifluralin	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 12:09	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	12/11/25 15:19	12/14/25 12:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	93		70 - 130	12/11/25 15:19	12/14/25 12:09	1
Perylene-d12	89		70 - 130	12/11/25 15:19	12/14/25 12:09	1
Triphenylphosphate	111		70 - 130	12/11/25 15:19	12/14/25 12:09	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		12/15/25 16:58	01/04/26 08:41	1
2-Methylnaphthalene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Acenaphthene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Acenaphthylene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Anthracene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Benzo[a]anthracene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Benzo[a]pyrene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Chrysene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Fluoranthene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1

Eurofins Pomona

Client Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

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		12/15/25 16:58	01/04/26 08:41	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Naphthalene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Phenanthrene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1
Pyrene	<0.19		0.19	ug/L		12/15/25 16:58	01/04/26 08:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	92		28 - 127	12/15/25 16:58	01/04/26 08:41	1
2-Fluorobiphenyl (Surr)	91		31 - 120	12/15/25 16:58	01/04/26 08:41	1
2-Fluorophenol (Surr)	62		17 - 120	12/15/25 16:58	01/04/26 08:41	1
Nitrobenzene-d5 (Surr)	99		27 - 120	12/15/25 16:58	01/04/26 08:41	1
Phenol-d6 (Surr)	38		10 - 120	12/15/25 16:58	01/04/26 08:41	1
p-Terphenyl-d14 (Surr)	93		45 - 120	12/15/25 16:58	01/04/26 08:41	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	12/15/25 16:58	01/05/26 09:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	101		33 - 139	12/15/25 16:58	01/05/26 09:43	1
2-Fluorobiphenyl (Surr)	107		33 - 126	12/15/25 16:58	01/05/26 09:43	1
2-Fluorophenol (Surr)	60		12 - 120	12/15/25 16:58	01/05/26 09:43	1
Nitrobenzene-d5 (Surr)	100		36 - 120	12/15/25 16:58	01/05/26 09:43	1
Phenol-d6 (Surr)	34		10 - 120	12/15/25 16:58	01/05/26 09:43	1
p-Terphenyl-d14 (Surr)	98		47 - 131	12/15/25 16:58	01/05/26 09:43	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			12/20/25 17:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		38 - 134		12/20/25 17:01	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)	<26		26	ug/L		12/14/25 10:45	12/22/25 20:13	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		12/14/25 10:45	12/22/25 20:13	1
C8-C18	<26		26	ug/L		12/14/25 10:45	12/22/25 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	110		60 - 130	12/14/25 10:45	12/22/25 20:13	1

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-2

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

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			12/20/25 21:48	1

Client Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-2

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

<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)	87		38 - 134		12/20/25 21:48	1

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

Action Limit Summary

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

Job ID: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL	RL	Method	Prep Type
				Limit			
Alachlor	<0.049		ug/L	2	0.049	525.2	Total/NA
Atrazine	<0.049		ug/L	3	0.049	525.2	Total/NA
Benzo[a]pyrene	<0.020		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: 380-187294-1
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)
380-187282-Y-1-A DU	Duplicate	95	85	112
380-187294-1	HALAWA SHAFT VIEWING POOL	93	89	111
380-187295-AB-1-A MS	Matrix Spike	94	98	114
LCS 380-191835/22-A	Lab Control Sample	95	97	112
LCSD 380-191835/23-A	Lab Control Sample Dup	95	98	116
MB 380-191835/20-A	Method Blank	94	79	109
MRL 380-191835/21-A	Lab Control Sample	96	86	111

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)
380-187294-1	HALAWA SHAFT VIEWING POOL	101	107	60	100	34	98
MB 570-670488/1-A	Method Blank	87	91	54	85	35	89

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)
380-187294-1	HALAWA SHAFT VIEWING POOL	92	91	62	99	38	93
LCS 570-670488/2-A	Lab Control Sample	88	90	65	75	42	92
LCSD 570-670488/3-A	Lab Control Sample Dup	78	81	60	67	39	81
MB 570-670488/1-A	Method Blank	93	89	56	92	35	85

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: 380-187294-1
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)
380-187025-C-1 MS	Matrix Spike	80
380-187025-C-1 MSD	Matrix Spike Duplicate	85
380-187294-1	HALAWA SHAFT VIEWING POOL	89
380-187294-2	TB: HALAWA SHAFT VIEWING POOL	87
LCS 570-673280/4	Lab Control Sample	84
LCSD 570-673280/5	Lab Control Sample Dup	91
MB 570-673280/6	Method Blank	88
MRL 570-673280/3	Lab Control Sample	80

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)
380-187025-B-1-A MS	Matrix Spike	106
380-187025-B-1-B MSD	Matrix Spike Duplicate	115
380-187294-1	HALAWA SHAFT VIEWING POOL	110
LCS 570-669844/2-A	Lab Control Sample	102
LCSD 570-669844/3-A	Lab Control Sample Dup	91
MB 570-669844/1-A	Method Blank	108
MRL 570-669844/4-A	Lab Control Sample	86

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-191835/20-A
Matrix: Water
Analysis Batch: 192249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 191835

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1-Methylnaphthalene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2,4'-DDD	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2,4'-DDE	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2,4'-DDT	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2,4-Dinitrotoluene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2,6-Dinitrotoluene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
2-Methylnaphthalene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
4,4'-DDD	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
4,4'-DDE	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
4,4'-DDT	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Acenaphthene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Acenaphthylene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Acetochlor	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Alachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
alpha-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
alpha-Chlordane	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Anthracene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 08:48	1
Atrazine	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Benz(a)anthracene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Benzo[a]pyrene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 08:48	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 08:48	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 08:48	1
beta-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		12/11/25 15:19	12/14/25 08:48	1
Bromacil	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Butachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Butylbenzylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 08:48	1
Chlorobenzilate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Chloroneb	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Chlorpyrifos	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Chrysene	<0.020		0.020	ug/L		12/11/25 15:19	12/14/25 08:48	1
delta-BHC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		12/11/25 15:19	12/14/25 08:48	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Dieldrin	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Diethylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 08:48	1
Dimethylphthalate	<0.49		0.49	ug/L		12/11/25 15:19	12/14/25 08:48	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		12/11/25 15:19	12/14/25 08:48	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Endosulfan sulfate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Endrin	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Endrin aldehyde	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
EPTC	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-191835/20-A
Matrix: Water
Analysis Batch: 192249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 191835

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Fluoranthene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Fluorene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
gamma-Chlordane	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Heptachlor	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Hexachlorobenzene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Isophorone	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Lindane	<0.0098		0.0098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Malathion	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Methoxychlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Metolachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Molinate	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Naphthalene	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Parathion	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Phenanthrene	<0.039		0.039	ug/L		12/11/25 15:19	12/14/25 08:48	1
Propachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Pyrene	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Simazine	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Terbacil	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Terbutylazine	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Thiobencarb	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		12/11/25 15:19	12/14/25 08:48	1
trans-Nonachlor	<0.049		0.049	ug/L		12/11/25 15:19	12/14/25 08:48	1
Trifluralin	<0.098		0.098	ug/L		12/11/25 15:19	12/14/25 08:48	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tridecane, 1-iodo-	0.604	T J N	ug/L		3.71	35599-77-0	12/11/25 15:19	12/14/25 08:48	1
Phenol, p-tert-butyl-	0.986	T J N	ug/L		3.80	98-54-4	12/11/25 15:19	12/14/25 08:48	1
Unknown	0.496	T J	ug/L		3.87	N/A	12/11/25 15:19	12/14/25 08:48	1
Hexadecanamide	0.614	T J N	ug/L		6.93	629-54-9	12/11/25 15:19	12/14/25 08:48	1
9-Octadecenamide, (Z)-	6.03	T J N	ug/L		7.76	301-02-0	12/11/25 15:19	12/14/25 08:48	1
Octadecanamide	0.570	T J N	ug/L		7.86	124-26-5	12/11/25 15:19	12/14/25 08:48	1
Unknown	0.961	T J	ug/L		14.70	N/A	12/11/25 15:19	12/14/25 08:48	1
Unknown	0.594	T J	ug/L		15.55	N/A	12/11/25 15:19	12/14/25 08:48	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Nitro-m-xylene	94		70 - 130	12/11/25 15:19	12/14/25 08:48	1
Perylene-d12	79		70 - 130	12/11/25 15:19	12/14/25 08:48	1
Triphenylphosphate	109		70 - 130	12/11/25 15:19	12/14/25 08:48	1

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-191835/22-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
1-Methylnaphthalene	1.96	1.76		ug/L		90	70 - 130
2,4'-DDD	1.96	2.03		ug/L		104	70 - 130
2,4'-DDE	1.96	1.97		ug/L		100	70 - 130
2,4'-DDT	1.96	2.03		ug/L		104	70 - 130
2,4-Dinitrotoluene	1.96	1.99		ug/L		101	70 - 130
2,6-Dinitrotoluene	1.96	1.97		ug/L		100	70 - 130
2-Methylnaphthalene	1.96	1.78		ug/L		91	70 - 130
4,4'-DDD	1.96	2.04		ug/L		104	70 - 130
4,4'-DDE	1.96	2.07		ug/L		105	70 - 130
4,4'-DDT	1.96	1.90		ug/L		97	70 - 130
Acenaphthene	1.96	1.95		ug/L		99	70 - 130
Acenaphthylene	1.96	1.94		ug/L		99	70 - 130
Acetochlor	1.96	2.06		ug/L		105	70 - 130
Alachlor	1.96	2.05		ug/L		104	70 - 130
alpha-BHC	1.96	1.96		ug/L		100	70 - 130
alpha-Chlordane	1.96	2.19		ug/L		112	70 - 130
Anthracene	1.96	1.69		ug/L		86	70 - 130
Atrazine	1.96	2.11		ug/L		108	70 - 130
Benz(a)anthracene	1.96	1.84		ug/L		94	70 - 130
Benzo[a]pyrene	1.96	1.92		ug/L		98	70 - 130
Benzo[b]fluoranthene	1.96	1.99		ug/L		101	70 - 130
Benzo[g,h,i]perylene	1.96	1.99		ug/L		101	70 - 130
Benzo[k]fluoranthene	1.96	1.94		ug/L		99	70 - 130
beta-BHC	1.96	1.90		ug/L		97	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	2.02		ug/L		103	70 - 130
Bromacil	1.96	1.93		ug/L		98	70 - 130
Butachlor	1.96	2.04		ug/L		104	70 - 130
Butylbenzylphthalate	1.96	2.25		ug/L		115	70 - 130
Chlorobenzilate	1.96	2.09		ug/L		106	70 - 130
Chloroneb	1.96	1.90		ug/L		97	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	2.21		ug/L		112	70 - 130
Chlorpyrifos	1.96	2.11		ug/L		107	70 - 130
Chrysene	1.96	1.88		ug/L		96	70 - 130
delta-BHC	1.96	1.87		ug/L		95	70 - 130
Di(2-ethylhexyl)adipate	1.96	2.24		ug/L		114	70 - 130
Dibenz(a,h)anthracene	1.96	1.89		ug/L		96	70 - 130
Diclorvos (DDVP)	1.96	1.92		ug/L		98	70 - 130
Dieldrin	1.96	2.00		ug/L		102	70 - 130
Diethylphthalate	1.96	2.18		ug/L		111	70 - 130
Dimethylphthalate	1.96	2.02		ug/L		103	70 - 130
Di-n-butyl phthalate	3.93	4.14		ug/L		105	70 - 130
Di-n-octyl phthalate	1.96	1.98		ug/L		101	70 - 130
Endosulfan I (Alpha)	1.96	1.83		ug/L		93	70 - 130
Endosulfan II (Beta)	1.96	1.87		ug/L		95	70 - 130
Endosulfan sulfate	1.96	2.12		ug/L		108	70 - 130
Endrin	1.96	2.15		ug/L		109	70 - 130
Endrin aldehyde	1.96	1.86		ug/L		95	60 - 130
EPTC	1.96	2.04		ug/L		104	70 - 130

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-191835/22-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec	
							Limits	
Fluoranthene	1.96	2.05		ug/L		104	70 - 130	
Fluorene	1.96	1.97		ug/L		100	70 - 130	
gamma-Chlordane	1.96	2.22		ug/L		113	70 - 130	
Heptachlor	1.96	2.06		ug/L		105	70 - 130	
Heptachlor epoxide (isomer B)	1.96	2.07		ug/L		105	70 - 130	
Hexachlorobenzene	1.96	2.13		ug/L		109	70 - 130	
Hexachlorocyclopentadiene	1.96	2.01		ug/L		102	70 - 130	
Indeno[1,2,3-cd]pyrene	1.96	1.98		ug/L		101	70 - 130	
Isophorone	1.96	2.09		ug/L		106	70 - 130	
Lindane	1.96	1.91		ug/L		97	70 - 130	
Malathion	1.96	1.92		ug/L		98	70 - 130	
Methoxychlor	1.96	2.04		ug/L		104	70 - 130	
Metolachlor	1.96	1.92		ug/L		98	70 - 130	
Molinate	1.96	2.10		ug/L		107	70 - 130	
Naphthalene	1.96	1.82		ug/L		93	70 - 130	
Parathion	1.96	2.23		ug/L		114	70 - 130	
Pendimethalin (Penoxaline)	1.96	2.06		ug/L		105	70 - 130	
Phenanthrene	1.96	1.90		ug/L		97	70 - 130	
Propachlor	1.96	2.16		ug/L		110	70 - 130	
Pyrene	1.96	2.02		ug/L		103	70 - 130	
Simazine	1.96	1.98		ug/L		101	70 - 130	
Terbacil	1.96	2.11		ug/L		107	70 - 130	
Terbutylazine	1.96	2.21		ug/L		112	70 - 130	
Thiobencarb	1.96	2.14		ug/L		109	70 - 130	
trans-Nonachlor	1.96	2.21		ug/L		113	70 - 130	
Trifluralin	1.96	2.06		ug/L		105	70 - 130	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	112		70 - 130

Lab Sample ID: LCSD 380-191835/23-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	
							Limits		RPD	Limit
1-Methylnaphthalene	1.97	1.83		ug/L		93	70 - 130	4	20	
2,4'-DDD	1.97	2.07		ug/L		105	70 - 130	2	20	
2,4'-DDE	1.97	2.05		ug/L		104	70 - 130	4	20	
2,4'-DDT	1.97	2.12		ug/L		108	70 - 130	4	20	
2,4-Dinitrotoluene	1.97	1.96		ug/L		100	70 - 130	1	20	
2,6-Dinitrotoluene	1.97	2.01		ug/L		102	70 - 130	2	20	
2-Methylnaphthalene	1.97	1.80		ug/L		92	70 - 130	1	20	
4,4'-DDD	1.97	2.11		ug/L		107	70 - 130	3	20	
4,4'-DDE	1.97	2.15		ug/L		109	70 - 130	4	20	
4,4'-DDT	1.97	1.99		ug/L		101	70 - 130	4	20	
Acenaphthene	1.97	1.92		ug/L		98	70 - 130	2	20	

Eurofins Pomona

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-191835/23-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
Acenaphthylene	1.97	1.97		ug/L		100	70 - 130	1	20
Acetochlor	1.97	2.07		ug/L		105	70 - 130	0	20
Alachlor	1.97	2.07		ug/L		105	70 - 130	1	20
alpha-BHC	1.97	1.95		ug/L		99	70 - 130	1	20
alpha-Chlordane	1.97	2.27		ug/L		115	70 - 130	3	20
Anthracene	1.97	1.73		ug/L		88	70 - 130	2	20
Atrazine	1.97	2.11		ug/L		107	70 - 130	0	20
Benz(a)anthracene	1.97	1.90		ug/L		96	70 - 130	3	20
Benzo[a]pyrene	1.97	1.94		ug/L		99	70 - 130	1	20
Benzo[b]fluoranthene	1.97	1.95		ug/L		99	70 - 130	2	20
Benzo[g,h,i]perylene	1.97	2.00		ug/L		101	70 - 130	0	20
Benzo[k]fluoranthene	1.97	2.02		ug/L		103	70 - 130	4	20
beta-BHC	1.97	1.93		ug/L		98	70 - 130	2	20
Bis(2-ethylhexyl) phthalate	1.97	2.11		ug/L		107	70 - 130	4	20
Bromacil	1.97	1.96		ug/L		99	70 - 130	1	20
Butachlor	1.97	2.10		ug/L		106	70 - 130	3	20
Butylbenzylphthalate	1.97	2.27		ug/L		115	70 - 130	1	20
Chlorobenzilate	1.97	2.08		ug/L		106	70 - 130	0	20
Chloroneb	1.97	1.87		ug/L		95	70 - 130	2	20
Chlorothalonil (Draconil, Bravo)	1.97	2.21		ug/L		112	70 - 130	0	20
Chlorpyrifos	1.97	2.18		ug/L		111	70 - 130	4	20
Chrysene	1.97	1.85		ug/L		94	70 - 130	1	20
delta-BHC	1.97	1.91		ug/L		97	70 - 130	2	20
Di(2-ethylhexyl)adipate	1.97	2.38		ug/L		121	70 - 130	6	20
Dibenz(a,h)anthracene	1.97	1.93		ug/L		98	70 - 130	2	20
Diclorvos (DDVP)	1.97	1.94		ug/L		98	70 - 130	1	20
Dieldrin	1.97	2.00		ug/L		102	70 - 130	0	20
Diethylphthalate	1.97	2.12		ug/L		108	70 - 130	3	20
Dimethylphthalate	1.97	2.12		ug/L		107	70 - 130	5	20
Di-n-butyl phthalate	3.94	4.26		ug/L		108	70 - 130	3	20
Di-n-octyl phthalate	1.97	2.04		ug/L		104	70 - 130	3	20
Endosulfan I (Alpha)	1.97	1.89		ug/L		96	70 - 130	4	20
Endosulfan II (Beta)	1.97	1.90		ug/L		97	70 - 130	2	20
Endosulfan sulfate	1.97	2.17		ug/L		110	70 - 130	3	20
Endrin	1.97	2.17		ug/L		110	70 - 130	1	20
Endrin aldehyde	1.97	1.88		ug/L		95	60 - 130	1	20
EPTC	1.97	2.09		ug/L		106	70 - 130	3	20
Fluoranthene	1.97	2.11		ug/L		107	70 - 130	3	20
Fluorene	1.97	1.95		ug/L		99	70 - 130	1	20
gamma-Chlordane	1.97	2.29		ug/L		116	70 - 130	3	20
Heptachlor	1.97	2.09		ug/L		106	70 - 130	2	20
Heptachlor epoxide (isomer B)	1.97	2.10		ug/L		107	70 - 130	1	20
Hexachlorobenzene	1.97	2.06		ug/L		105	70 - 130	3	20
Hexachlorocyclopentadiene	1.97	2.03		ug/L		103	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	1.97	2.04		ug/L		104	70 - 130	3	20
Isophorone	1.97	2.07		ug/L		105	70 - 130	1	20
Lindane	1.97	1.93		ug/L		98	70 - 130	1	20
Malathion	1.97	1.95		ug/L		99	70 - 130	1	20
Methoxychlor	1.97	2.07		ug/L		105	70 - 130	1	20

Eurofins Pomona

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-191835/23-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Metolachlor	1.97	1.94		ug/L		99	70 - 130	1	20
Molinate	1.97	2.06		ug/L		105	70 - 130	2	20
Naphthalene	1.97	1.85		ug/L		94	70 - 130	2	20
Parathion	1.97	2.24		ug/L		114	70 - 130	1	20
Pendimethalin (Penoxaline)	1.97	2.09		ug/L		106	70 - 130	2	20
Phenanthrene	1.97	1.92		ug/L		97	70 - 130	1	20
Propachlor	1.97	2.13		ug/L		108	70 - 130	2	20
Pyrene	1.97	2.07		ug/L		105	70 - 130	2	20
Simazine	1.97	1.98		ug/L		101	70 - 130	0	20
Terbacil	1.97	2.13		ug/L		108	70 - 130	1	20
Terbutylazine	1.97	2.24		ug/L		114	70 - 130	2	20
Thiobencarb	1.97	2.17		ug/L		110	70 - 130	1	20
trans-Nonachlor	1.97	2.25		ug/L		114	70 - 130	2	20
Trifluralin	1.97	2.05		ug/L		104	70 - 130	1	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	116		70 - 130

Lab Sample ID: MRL 380-191835/21-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0983	0.112		ug/L		114	50 - 150
2,4'-DDD	0.0983	0.0854	J	ug/L		87	50 - 150
2,4'-DDE	0.0983	0.0973	J	ug/L		99	50 - 150
2,4'-DDT	0.0983	0.0899	J	ug/L		91	50 - 150
2,4-Dinitrotoluene	0.0983	0.0859	J	ug/L		87	50 - 150
2,6-Dinitrotoluene	0.0983	0.104		ug/L		106	50 - 150
2-Methylnaphthalene	0.0983	0.105		ug/L		107	50 - 150
4,4'-DDD	0.0983	0.0953	J	ug/L		97	50 - 150
4,4'-DDE	0.0983	0.0911	J	ug/L		93	50 - 150
4,4'-DDT	0.0983	0.110		ug/L		112	50 - 150
Acenaphthene	0.0983	0.0816	J	ug/L		83	50 - 150
Acenaphthylene	0.0983	0.0893	J	ug/L		91	50 - 150
Acetochlor	0.0983	0.105		ug/L		107	50 - 150
Alachlor	0.0491	0.0497		ug/L		101	50 - 150
alpha-BHC	0.0983	0.0887	J	ug/L		90	50 - 150
alpha-Chlordane	0.0246	<0.029		ug/L		89	50 - 150
Anthracene	0.0197	0.0198	J	ug/L		101	50 - 150
Atrazine	0.0491	0.0495		ug/L		101	50 - 150
Benz(a)anthracene	0.0491	0.0513		ug/L		104	50 - 150
Benzo[a]pyrene	0.0197	0.0217		ug/L		110	50 - 150
Benzo[b]fluoranthene	0.0197	0.0222		ug/L		113	50 - 150
Benzo[g,h,i]perylene	0.0491	0.0501		ug/L		102	50 - 150
Benzo[k]fluoranthene	0.0197	0.0216		ug/L		110	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-191835/21-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
beta-BHC	0.0983	0.101		ug/L		103	50 - 150
Bis(2-ethylhexyl) phthalate	0.590	0.627		ug/L		106	50 - 150
Bromacil	0.0983	0.117		ug/L		119	50 - 150
Butachlor	0.0491	0.0602		ug/L		123	50 - 150
Butylbenzylphthalate	0.491	0.591		ug/L		120	50 - 150
Chlorobenzilate	0.0983	0.0990		ug/L		101	50 - 150
Chloroneb	0.0983	0.101		ug/L		103	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0983	0.0901	J	ug/L		92	50 - 150
Chlorpyrifos	0.0491	0.0446	J	ug/L		91	50 - 150
Chrysene	0.0197	0.0177	J	ug/L		90	50 - 150
delta-BHC	0.0983	0.0905	J	ug/L		92	50 - 150
Di(2-ethylhexyl)adipate	0.590	0.745		ug/L		126	50 - 150
Dibenz(a,h)anthracene	0.0491	0.0479	J	ug/L		97	50 - 150
Diclorvos (DDVP)	0.0491	0.0529		ug/L		108	50 - 150
Dieldrin	0.00983	0.00708	J	ug/L		72	50 - 150
Diethylphthalate	0.491	0.527		ug/L		107	50 - 150
Dimethylphthalate	0.491	0.492		ug/L		100	50 - 150
Di-n-butyl phthalate	0.491	0.514	J	ug/L		105	49 - 243
Di-n-octyl phthalate	0.0983	0.109		ug/L		111	50 - 150
Endosulfan I (Alpha)	0.0983	0.0916	J	ug/L		93	50 - 150
Endosulfan II (Beta)	0.0983	0.100		ug/L		102	50 - 150
Endosulfan sulfate	0.0983	0.0976	J	ug/L		99	50 - 150
Endrin	0.00983	0.0111		ug/L		113	50 - 150
Endrin aldehyde	0.0983	0.116		ug/L		118	50 - 150
EPTC	0.0983	0.0966	J	ug/L		98	50 - 150
Fluoranthene	0.0983	0.0949	J	ug/L		97	50 - 150
Fluorene	0.0491	<0.049		ug/L		99	50 - 150
gamma-Chlordane	0.0246	0.0222	J	ug/L		90	50 - 150
Heptachlor	0.00983	0.00909	J	ug/L		93	50 - 150
Heptachlor epoxide (isomer B)	0.00983	0.00833	J	ug/L		85	50 - 150
Hexachlorobenzene	0.0491	0.0489	J	ug/L		100	50 - 150
Hexachlorocyclopentadiene	0.0491	0.0431	J	ug/L		88	50 - 150
Indeno[1,2,3-cd]pyrene	0.0491	0.0517		ug/L		105	50 - 150
Isophorone	0.0983	0.111		ug/L		113	50 - 150
Lindane	0.00983	0.0100		ug/L		102	50 - 150
Malathion	0.0983	0.101		ug/L		102	50 - 150
Methoxychlor	0.0491	0.0517		ug/L		105	50 - 150
Metolachlor	0.0491	0.0566		ug/L		115	50 - 150
Molinate	0.0983	0.102		ug/L		104	50 - 150
Naphthalene	0.0983	0.0959	J	ug/L		98	50 - 150
Parathion	0.0983	0.0804	J	ug/L		82	50 - 150
Pendimethalin (Penoxaline)	0.0983	0.0955	J	ug/L		97	50 - 150
Phenanthrene	0.0393	0.0348	J	ug/L		89	50 - 150
Propachlor	0.0491	0.0533		ug/L		108	50 - 150
Pyrene	0.0491	0.0477	J	ug/L		97	50 - 150
Simazine	0.0491	0.0437	J	ug/L		89	50 - 150
Terbacil	0.0983	0.106		ug/L		107	50 - 150
Terbuthylazine	0.0983	0.103		ug/L		105	50 - 150
Thiobencarb	0.0983	0.101		ug/L		103	50 - 150

Eurofins Pomona

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-191835/21-A

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Spike	MRL	MRL	Unit	D	%Rec	%Rec Limits
	Added	Result	Qualifier				
trans-Nonachlor	0.0246	<0.026		ug/L		87	50 - 150
Trifluralin	0.0983	0.106		ug/L		107	50 - 150

Surrogate	MRL	MRL	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	96		70 - 130
Perylene-d12	86		70 - 130
Triphenylphosphate	111		70 - 130

Lab Sample ID: 380-187295-AB-1-A MS

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.099		1.98	1.79		ug/L		90	70 - 130
2,4'-DDD	<0.099		1.98	2.10		ug/L		106	70 - 130
2,4'-DDE	<0.099		1.98	2.04		ug/L		103	70 - 130
2,4'-DDT	<0.099		1.98	2.17		ug/L		110	70 - 130
2,4-Dinitrotoluene	<0.099		1.98	2.13		ug/L		108	70 - 130
2,6-Dinitrotoluene	<0.099		1.98	2.05		ug/L		104	70 - 130
2-Methylnaphthalene	<0.099		1.98	1.79		ug/L		90	70 - 130
4,4'-DDD	<0.099		1.98	2.13		ug/L		108	70 - 130
4,4'-DDE	<0.099		1.98	2.16		ug/L		109	70 - 130
4,4'-DDT	<0.099		1.98	2.04		ug/L		103	70 - 130
Acenaphthene	<0.099		1.98	1.97		ug/L		100	70 - 130
Acenaphthylene	<0.099		1.98	1.95		ug/L		99	70 - 130
Acetochlor	<0.099		1.98	2.09		ug/L		106	70 - 130
Alachlor	<0.049		1.98	2.10		ug/L		106	70 - 130
alpha-BHC	<0.099		1.98	1.96		ug/L		99	70 - 130
alpha-Chlordane	<0.049		1.98	2.33		ug/L		118	70 - 130
Anthracene	<0.020		1.98	1.49		ug/L		75	70 - 130
Atrazine	<0.049		1.98	2.13		ug/L		108	70 - 130
Benz(a)anthracene	<0.049		1.98	1.87		ug/L		95	70 - 130
Benzo[a]pyrene	<0.020		1.98	1.84		ug/L		93	70 - 130
Benzo[b]fluoranthene	<0.020		1.98	2.02		ug/L		102	70 - 130
Benzo[g,h,i]perylene	<0.049		1.98	2.02		ug/L		102	70 - 130
Benzo[k]fluoranthene	<0.020		1.98	2.00		ug/L		101	70 - 130
beta-BHC	<0.099		1.98	1.94		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.98	2.11		ug/L		107	70 - 130
Bromacil	<0.099		1.98	2.05		ug/L		104	70 - 130
Butachlor	<0.049		1.98	2.09		ug/L		106	70 - 130
Butylbenzylphthalate	<0.49		1.98	2.25		ug/L		114	70 - 130
Chlorobenzilate	<0.099		1.98	2.11		ug/L		107	70 - 130
Chloroneb	<0.099		1.98	1.91		ug/L		97	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.98	2.27		ug/L		115	70 - 130
Chlorpyrifos	<0.049		1.98	2.19		ug/L		111	70 - 130
Chrysene	<0.020		1.98	1.90		ug/L		96	70 - 130
delta-BHC	<0.099		1.98	1.93		ug/L		98	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.98	2.36		ug/L		119	70 - 130

QC Sample Results

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

Job ID: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-187295-AB-1-A MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 192249

Prep Batch: 191835

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier	Added	Result	Qualifier				
Dibenz(a,h)anthracene	<0.049		1.98	1.98		ug/L		100	70 - 130
Diclorvos (DDVP)	<0.049		1.98	1.95		ug/L		99	70 - 130
Dieldrin	<0.0099		1.98	2.03		ug/L		103	70 - 130
Diethylphthalate	<0.49		1.98	2.20		ug/L		111	70 - 130
Dimethylphthalate	<0.49		1.98	2.05		ug/L		104	70 - 130
Di-n-butyl phthalate	<0.99		3.95	4.29		ug/L		108	70 - 130
Di-n-octyl phthalate	<0.099		1.98	2.11		ug/L		107	70 - 130
Endosulfan I (Alpha)	<0.099		1.98	1.89		ug/L		96	70 - 130
Endosulfan II (Beta)	<0.099		1.98	1.95		ug/L		99	70 - 130
Endosulfan sulfate	<0.099		1.98	2.23		ug/L		113	70 - 130
Endrin	<0.0099		1.98	2.20		ug/L		111	70 - 130
Endrin aldehyde	<0.099		1.98	1.61		ug/L		81	60 - 130
EPTC	<0.099		1.98	2.06		ug/L		104	70 - 130
Fluoranthene	<0.099		1.98	2.13		ug/L		108	70 - 130
Fluorene	<0.049		1.98	2.02		ug/L		102	70 - 130
gamma-Chlordane	<0.049		1.98	2.35		ug/L		119	70 - 130
Heptachlor	<0.0099		1.98	2.10		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	<0.0099		1.98	2.13		ug/L		108	70 - 130
Hexachlorobenzene	<0.049		1.98	2.03		ug/L		103	70 - 130
Hexachlorocyclopentadiene	<0.049		1.98	2.07		ug/L		105	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.98	2.06		ug/L		105	70 - 130
Isophorone	<0.099		1.98	2.09		ug/L		106	70 - 130
Lindane	<0.0099		1.98	1.93		ug/L		98	70 - 130
Malathion	<0.099		1.98	2.00		ug/L		101	70 - 130
Methoxychlor	<0.049		1.98	2.09		ug/L		106	70 - 130
Metolachlor	<0.049		1.98	1.97		ug/L		100	70 - 130
Molinate	<0.099		1.98	2.09		ug/L		106	70 - 130
Naphthalene	<0.099		1.98	1.87		ug/L		94	70 - 130
Parathion	<0.099		1.98	2.35		ug/L		119	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.98	2.22		ug/L		112	70 - 130
Phenanthrene	<0.040		1.98	1.91		ug/L		97	70 - 130
Propachlor	<0.049		1.98	2.21		ug/L		112	70 - 130
Pyrene	<0.049		1.98	2.07		ug/L		105	70 - 130
Simazine	<0.049		1.98	1.98		ug/L		100	70 - 130
Terbacil	<0.099		1.98	2.22		ug/L		112	70 - 130
Terbutylazine	<0.099		1.98	2.23		ug/L		113	70 - 130
Thiobencarb	<0.099		1.98	2.21		ug/L		112	70 - 130
trans-Nonachlor	<0.049		1.98	2.30		ug/L		117	70 - 130
Trifluralin	<0.099		1.98	2.14		ug/L		109	70 - 130

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	94		70 - 130
Perylene-d12	98		70 - 130
Triphenylphosphate	114		70 - 130

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-187282-Y-1-A DU
Matrix: Water
Analysis Batch: 192249

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 191835

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
1-Methylnaphthalene	<0.099		<0.098		ug/L		NC	20
2,4'-DDD	<0.099		<0.098		ug/L		NC	20
2,4'-DDE	<0.099		<0.098		ug/L		NC	20
2,4'-DDT	<0.099		<0.098		ug/L		NC	20
2,4-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
2,6-Dinitrotoluene	<0.099		<0.098		ug/L		NC	20
2-Methylnaphthalene	<0.099		<0.098		ug/L		NC	20
4,4'-DDD	<0.099		<0.098		ug/L		NC	20
4,4'-DDE	<0.099		<0.098		ug/L		NC	20
4,4'-DDT	<0.099		<0.098		ug/L		NC	20
Acenaphthene	<0.099		<0.098		ug/L		NC	20
Acenaphthylene	<0.099		<0.098		ug/L		NC	20
Acetochlor	<0.099		<0.098		ug/L		NC	20
Alachlor	<0.050		<0.049		ug/L		NC	20
alpha-BHC	<0.099		<0.098		ug/L		NC	20
alpha-Chlordane	<0.050		<0.049		ug/L		NC	20
Anthracene	<0.020		<0.020		ug/L		NC	20
Atrazine	<0.050		<0.049		ug/L		NC	20
Benz(a)anthracene	<0.050		<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	<0.050		<0.049		ug/L		NC	20
Benzo[k]fluoranthene	<0.020		<0.020		ug/L		NC	20
beta-BHC	<0.099		<0.098		ug/L		NC	20
Bis(2-ethylhexyl) phthalate	<0.60		<0.59		ug/L		NC	20
Bromacil	<0.099		<0.098		ug/L		NC	20
Butachlor	<0.050		<0.049		ug/L		NC	20
Butylbenzylphthalate	<0.50		<0.49		ug/L		NC	20
Chlorobenzilate	<0.099		<0.098		ug/L		NC	20
Chloroneb	<0.099		<0.098		ug/L		NC	20
Chlorothalonil (Draconil, Bravo)	<0.099		<0.098		ug/L		NC	20
Chlorpyrifos	<0.050		<0.049		ug/L		NC	20
Chrysene	<0.020		<0.020		ug/L		NC	20
delta-BHC	<0.099		<0.098		ug/L		NC	20
Di(2-ethylhexyl)adipate	<0.60		<0.59		ug/L		NC	20
Dibenz(a,h)anthracene	<0.050		<0.049		ug/L		NC	20
Diclorvos (DDVP)	<0.050		<0.049		ug/L		NC	20
Dieldrin	<0.0099		<0.0098		ug/L		NC	20
Diethylphthalate	<0.50		<0.49		ug/L		NC	20
Dimethylphthalate	<0.50		<0.49		ug/L		NC	20
Di-n-butyl phthalate	<0.99		<0.98		ug/L		NC	20
Di-n-octyl phthalate	<0.099		<0.098		ug/L		NC	20
Endosulfan I (Alpha)	<0.099		<0.098		ug/L		NC	20
Endosulfan II (Beta)	<0.099		<0.098		ug/L		NC	20
Endosulfan sulfate	<0.099		<0.098		ug/L		NC	20
Endrin	<0.0099		<0.0098		ug/L		NC	20
Endrin aldehyde	<0.099		<0.098		ug/L		NC	20
EPTC	<0.099		<0.098		ug/L		NC	20

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-187282-Y-1-A DU

Matrix: Water

Analysis Batch: 192249

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 191835

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Fluoranthene	<0.099		<0.098		ug/L		NC	20
Fluorene	<0.050		<0.049		ug/L		NC	20
gamma-Chlordane	<0.050		<0.049		ug/L		NC	20
Heptachlor	<0.0099		<0.0098		ug/L		NC	20
Heptachlor epoxide (isomer B)	<0.0099		<0.0098		ug/L		NC	20
Hexachlorobenzene	<0.050		<0.049		ug/L		NC	20
Hexachlorocyclopentadiene	<0.050		<0.049		ug/L		NC	20
Indeno[1,2,3-cd]pyrene	<0.050		<0.049		ug/L		NC	20
Isophorone	<0.099		<0.098		ug/L		NC	20
Lindane	<0.0099		<0.0098		ug/L		NC	20
Malathion	<0.099		<0.098		ug/L		NC	20
Methoxychlor	<0.050		<0.049		ug/L		NC	20
Metolachlor	<0.050		<0.049		ug/L		NC	20
Molinate	<0.099		<0.098		ug/L		NC	20
Naphthalene	<0.099		<0.098		ug/L		NC	20
Parathion	<0.099		<0.098		ug/L		NC	20
Pendimethalin (Penoxaline)	<0.099		<0.098		ug/L		NC	20
Phenanthrene	<0.040		<0.039		ug/L		NC	20
Propachlor	<0.050		<0.049		ug/L		NC	20
Pyrene	<0.050		<0.049		ug/L		NC	20
Simazine	<0.050		<0.049		ug/L		NC	20
Terbacil	<0.099		<0.098		ug/L		NC	20
Terbutylazine	<0.099		<0.098		ug/L		NC	20
Thiobencarb	<0.099		<0.098		ug/L		NC	20
Total Permethrin (mixed isomers)	<0.20		<0.20		ug/L		NC	20
trans-Nonachlor	<0.050		<0.049		ug/L		NC	20
Trifluralin	<0.099		<0.098		ug/L		NC	20

Surrogate	DU	DU	Limits
	%Recovery	Qualifier	
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	85		70 - 130
Triphenylphosphate	112		70 - 130

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

Lab Sample ID: MB 570-670488/1-A

Matrix: Water

Analysis Batch: 678569

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 670488

Tentatively Identified Compound	Est. Result	MB MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	12/15/25 16:58	01/05/26 09:20	1

Surrogate	MB MB %Recovery	MB MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	87		33 - 139	12/15/25 16:58	01/05/26 09:20	1
2-Fluorobiphenyl (Surr)	91		33 - 126	12/15/25 16:58	01/05/26 09:20	1
2-Fluorophenol (Surr)	54		12 - 120	12/15/25 16:58	01/05/26 09:20	1
Nitrobenzene-d5 (Surr)	85		36 - 120	12/15/25 16:58	01/05/26 09:20	1
Phenol-d6 (Surr)	35		10 - 120	12/15/25 16:58	01/05/26 09:20	1

Eurofins Pomona

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-670488/1-A
Matrix: Water
Analysis Batch: 678569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670488

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>p</i> -Terphenyl-d14 (Surr)	89		47 - 131	12/15/25 16:58	01/05/26 09:20	1

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

Lab Sample ID: MB 570-670488/1-A
Matrix: Water
Analysis Batch: 671998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 670488

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
2-Methylnaphthalene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Acenaphthene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Acenaphthylene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Anthracene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Benzo[a]anthracene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Benzo[a]pyrene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Chrysene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Fluoranthene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Fluorene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Naphthalene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Phenanthrene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1
Pyrene	<0.20		0.20	ug/L		12/15/25 16:58	12/18/25 06:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	93		28 - 127	12/15/25 16:58	12/18/25 06:56	1
2-Fluorobiphenyl (Surr)	89		31 - 120	12/15/25 16:58	12/18/25 06:56	1
2-Fluorophenol (Surr)	56		17 - 120	12/15/25 16:58	12/18/25 06:56	1
Nitrobenzene-d5 (Surr)	92		27 - 120	12/15/25 16:58	12/18/25 06:56	1
Phenol-d6 (Surr)	35		10 - 120	12/15/25 16:58	12/18/25 06:56	1
<i>p</i> -Terphenyl-d14 (Surr)	85		45 - 120	12/15/25 16:58	12/18/25 06:56	1

Lab Sample ID: LCS 570-670488/2-A
Matrix: Water
Analysis Batch: 671998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 670488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	15.0		ug/L		75	47 - 120
2-Methylnaphthalene	20.0	15.3		ug/L		77	43 - 120
Acenaphthene	20.0	18.8		ug/L		94	60 - 132
Acenaphthylene	20.0	17.8		ug/L		89	54 - 126
Anthracene	20.0	18.9		ug/L		94	43 - 120
Benzo[a]anthracene	20.0	19.2		ug/L		96	42 - 133
Benzo[a]pyrene	20.0	19.9		ug/L		99	32 - 148

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-670488/2-A

Matrix: Water

Analysis Batch: 671998

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 670488

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzo[b]fluoranthene	20.0	19.2		ug/L		96	42 - 140	
Benzo[g,h,i]perylene	20.0	17.6		ug/L		88	1 - 195	
Benzo[k]fluoranthene	20.0	18.6		ug/L		93	25 - 146	
Chrysene	20.0	18.9		ug/L		94	44 - 140	
Dibenz(a,h)anthracene	20.0	18.7		ug/L		93	1 - 200	
Fluoranthene	20.0	18.8		ug/L		94	43 - 121	
Fluorene	20.0	18.6		ug/L		93	70 - 120	
Indeno[1,2,3-cd]pyrene	20.0	18.1		ug/L		90	1 - 151	
Naphthalene	20.0	14.7		ug/L		73	36 - 120	
Phenanthrene	20.0	18.9		ug/L		94	65 - 120	
Pyrene	20.0	20.6		ug/L		103	70 - 120	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	88		28 - 127
2-Fluorobiphenyl (Surr)	90		31 - 120
2-Fluorophenol (Surr)	65		17 - 120
Nitrobenzene-d5 (Surr)	75		27 - 120
Phenol-d6 (Surr)	42		10 - 120
p-Terphenyl-d14 (Surr)	92		45 - 120

Lab Sample ID: LCSD 570-670488/3-A

Matrix: Water

Analysis Batch: 671998

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 670488

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits		RPD Limit	
1-Methylnaphthalene	20.0	13.9		ug/L		70	47 - 120	8	20	
2-Methylnaphthalene	20.0	13.6		ug/L		68	43 - 120	12	20	
Acenaphthene	20.0	16.6		ug/L		83	60 - 132	13	29	
Acenaphthylene	20.0	15.6		ug/L		78	54 - 126	13	45	
Anthracene	20.0	16.8		ug/L		84	43 - 120	12	40	
Benzo[a]anthracene	20.0	17.0		ug/L		85	42 - 133	12	32	
Benzo[a]pyrene	20.0	17.8		ug/L		89	32 - 148	11	43	
Benzo[b]fluoranthene	20.0	17.3		ug/L		87	42 - 140	10	43	
Benzo[g,h,i]perylene	20.0	16.4		ug/L		82	1 - 195	7	61	
Benzo[k]fluoranthene	20.0	17.0		ug/L		85	25 - 146	9	38	
Chrysene	20.0	16.7		ug/L		84	44 - 140	12	53	
Dibenz(a,h)anthracene	20.0	17.1		ug/L		86	1 - 200	9	75	
Fluoranthene	20.0	17.0		ug/L		85	43 - 121	10	40	
Fluorene	20.0	16.7		ug/L		84	70 - 120	11	23	
Indeno[1,2,3-cd]pyrene	20.0	16.9		ug/L		84	1 - 151	7	60	
Naphthalene	20.0	13.1		ug/L		65	36 - 120	11	39	
Phenanthrene	20.0	16.8		ug/L		84	65 - 120	11	24	
Pyrene	20.0	18.2		ug/L		91	70 - 120	12	30	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	78		28 - 127
2-Fluorobiphenyl (Surr)	81		31 - 120
2-Fluorophenol (Surr)	60		17 - 120

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 570-670488/3-A
Matrix: Water
Analysis Batch: 671998

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 670488

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5 (Surr)	67		27 - 120
Phenol-d6 (Surr)	39		10 - 120
p-Terphenyl-d14 (Surr)	81		45 - 120

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

Lab Sample ID: MB 570-673280/6
Matrix: Water
Analysis Batch: 673280

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			12/20/25 13:00	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	88		38 - 134		12/20/25 13:00	1

Lab Sample ID: LCS 570-673280/4
Matrix: Water
Analysis Batch: 673280

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	373		ug/L		93	78 - 120

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	84		38 - 134

Lab Sample ID: LCSD 570-673280/5
Matrix: Water
Analysis Batch: 673280

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (C4-C13)	400	406		ug/L		101	78 - 120	9	10

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		38 - 134

Lab Sample ID: MRL 570-673280/3
Matrix: Water
Analysis Batch: 673280

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	13.2		ug/L		132	50 - 150

Surrogate	MRL		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	80		38 - 134

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-187025-C-1 MS
Matrix: Water
Analysis Batch: 673280

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	382		ug/L		96	68 - 122
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	80		38 - 134						

Lab Sample ID: 380-187025-C-1 MSD
Matrix: Water
Analysis Batch: 673280

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	395		ug/L		99	68 - 122	3	18
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	85		38 - 134								

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

Lab Sample ID: MB 570-669844/1-A
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669844

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		12/14/25 10:45	12/22/25 15:56	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		12/14/25 10:45	12/22/25 15:56	1
C8-C18	<25		25	ug/L		12/14/25 10:45	12/22/25 15:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	108		60 - 130			12/14/25 10:45	12/22/25 15:56	1

Lab Sample ID: LCS 570-669844/2-A
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1390		ug/L		87	56 - 127
Surrogate	%Recovery	Qualifier	Limits				
n-Octacosane (Surr)	102		60 - 130				

Lab Sample ID: LCSD 570-669844/3-A
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669844

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1460		ug/L		91	56 - 127	5	23

QC Sample Results

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

Job ID: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 570-669844/3-A
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669844

	LCSD %Recovery	LCSD Qualifier	Limits
<i>n-Octacosane (Surr)</i>	91		60 - 130

Lab Sample ID: MRL 570-669844/4-A
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669844

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	0.0214	J	mg/L		107	50 - 150

	MRL %Recovery	MRL Qualifier	Limits
<i>n-Octacosane (Surr)</i>	86		60 - 130

Lab Sample ID: 380-187025-B-1-A MS
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 669844

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<26	F1 F2	1660	212	F1	ug/L		13	70 - 130

	MS %Recovery	MS Qualifier	Limits
<i>n-Octacosane (Surr)</i>	106		60 - 130

Lab Sample ID: 380-187025-B-1-B MSD
Matrix: Water
Analysis Batch: 674105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 669844

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	F1 F2	1670	354	F1 F2	ug/L		21	70 - 130	50	20

	MSD %Recovery	MSD Qualifier	Limits
<i>n-Octacosane (Surr)</i>	115		60 - 130

QC Association Summary

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

Job ID: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 191835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
MB 380-191835/20-A	Method Blank	Total/NA	Water	525.2	
LCS 380-191835/22-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-191835/23-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-191835/21-A	Lab Control Sample	Total/NA	Water	525.2	
380-187295-AB-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-187282-Y-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 192249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	191835
MB 380-191835/20-A	Method Blank	Total/NA	Water	525.2	191835
LCS 380-191835/22-A	Lab Control Sample	Total/NA	Water	525.2	191835
LCSD 380-191835/23-A	Lab Control Sample Dup	Total/NA	Water	525.2	191835
MRL 380-191835/21-A	Lab Control Sample	Total/NA	Water	525.2	191835
380-187295-AB-1-A MS	Matrix Spike	Total/NA	Water	525.2	191835
380-187282-Y-1-A DU	Duplicate	Total/NA	Water	525.2	191835

Prep Batch: 670488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	
MB 570-670488/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-670488/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-670488/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 671998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-670488/1-A	Method Blank	Total/NA	Water	625.1 SIM	670488
LCS 570-670488/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	670488
LCSD 570-670488/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	670488

Analysis Batch: 678331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1 SIM	670488

Analysis Batch: 678569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	670488
MB 570-670488/1-A	Method Blank	Total/NA	Water	625.1	670488

GC VOA

Analysis Batch: 673280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
380-187294-2	TB: HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
MB 570-673280/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-673280/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-673280/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-673280/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-187025-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

GC VOA (Continued)

Analysis Batch: 673280 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187025-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 669844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	3510C	
MB 570-669844/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-669844/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-669844/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-669844/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-187025-B-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-187025-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 674105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-187294-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B	669844
MB 570-669844/1-A	Method Blank	Total/NA	Water	8015B	669844
LCS 570-669844/2-A	Lab Control Sample	Total/NA	Water	8015B	669844
LCSD 570-669844/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	669844
MRL 570-669844/4-A	Lab Control Sample	Total/NA	Water	8015B	669844
380-187025-B-1-A MS	Matrix Spike	Total/NA	Water	8015B	669844
380-187025-B-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	669844

Lab Chronicle

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

Job ID: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-1

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			191835	IQ42	EA POM	12/11/25 15:19
Total/NA	Analysis	525.2		1	192249	Q8LA	EA POM	12/14/25 12:09
Total/NA	Prep	625.1			670488	S4EA	EET CAL 4	12/15/25 16:58
Total/NA	Analysis	625.1		1	678569	PQS1	EET CAL 4	01/05/26 09:43
Total/NA	Prep	625.1			670488	S4EA	EET CAL 4	12/15/25 16:58
Total/NA	Analysis	625.1 SIM		1	678331	PQS1	EET CAL 4	01/04/26 08:41
Total/NA	Analysis	8015B GRO LL		1	673280	YD9V	EET CAL 4	12/20/25 17:01
Total/NA	Prep	3510C			669844	TVD6	EET CAL 4	12/14/25 10:45
Total/NA	Analysis	8015B		1	674105	NR	EET CAL 4	12/22/25 20:13

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-187294-2

Date Collected: 12/09/25 09:25

Matrix: Water

Date Received: 12/11/25 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Batch Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	673280	YD9V	EET CAL 4	12/20/25 21:48

Laboratory References:

EA POM = Eurofins 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: 380-187294-1
 SDG: Weekly: Halawa Shaft Viewing Pool

Laboratory: Eurofins 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	11-17-26
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	State	3082	07-31-26

Accreditation/Certification Summary

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

Job ID: 380-187294-1
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
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	10-11-26

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

Method Summary

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

Job ID: 380-187294-1
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 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: 380-187294-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
380-187294-1	HALAWA SHAFT VIEWING POOL	Water	12/09/25 09:25	12/11/25 10:30	Hawaii
380-187294-2	TB: HALAWA SHAFT VIEWING POOL	Water	12/09/25 09:25	12/11/25 10:30	Hawaii

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

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Lopez, Maria		Carrier Tracking No(s): 380-285151 1	
Client Contact: Shipping/Receiving		E-Mail: Maria.Lopez@et.eurofins.com		Page: Page 1 of 1	
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State Hawaii		Job #: 380-187294-1	
Address: 2841 Dow Avenue, Suite 100,		Preservation Codes:			
City: Tustin		Analysis Requested			
State, Zip: CA, 92780		Total Number of Containers: 7			
Phone: 714-895-5494 (Tel)		Special Instructions/Note: MRLs are needed. Confirm any hits >RL			
PO #: N/A		MRLs are needed.			
WO #: N/A					
Project #: 38001111					
Site: Honolulu BWS Sites					
Due Date Requested: 12/29/2025					
TAT Requested (days): N/A					
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>					
Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>					
80158 DRD LL C67519C LHNL Ranges: C10					
C24C24 C35C8 C18					
80158 GRO LL L6030C(MOD) GRO					
625-1 SIM/MS25 Prep(MOD) Extended PAH List					
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
12/19/25		09:25 Hawaiian		G	
12/19/25		09:25 Hawaiian		G	
Sample Identification		Client ID (Lab ID)		Matrix (Weave, Swab, Observation, Other)	
HALAWA SHAFT VIEWING POOL (380-187294-1)				Water	
TB: HALAWA SHAFT VIEWING POOL (380-187294-2)				Water	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysts/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Eaton Analytical, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Eaton Analytical, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to Eurofins Eaton Analytical, LLC.</p>					
<p>Possible Hazard Identification</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p>					
<p>Unconfirmed Deliverable Requested: I II III IV Other (specify) _____</p> <p>Primary Deliverable Rank: 2</p>					
<p>Empty Kit Relinquished by _____ Date: _____</p> <p>Relinquished by: _____ Date/Time: 12/11/25 16:00 Company: EEF</p> <p>Relinquished by: _____ Date/Time: 12/11/25 17:00 Company: WLP</p> <p>Relinquished by: _____ Date/Time: _____ Company: _____</p>					
<p>Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Custody Seal No. 1-2/14 SRS</p> <p>Cooler Temperature(s) °C and Other Remarks: _____</p>					



380-187294 Chain of Custody



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-187294-1
SDG Number: Weekly: Halawa Shaft Viewing Pool

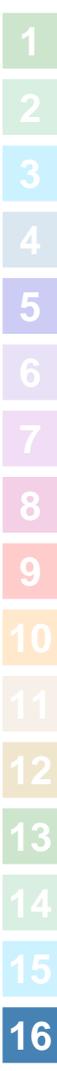
Login Number: 187294

List Number: 1

Creator: Edrosa, Rey

List Source: Eurofins 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).	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: 380-187294-1
SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 187294

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 12/11/25 07:29 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.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	