

ANALYTICAL REPORT

PREPARED FOR

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JOB DESCRIPTION

RED-HILL
Weekly: Halawa Shaft Viewing Pool

JOB NUMBER

380-158447-1

Eurofins Eaton Analytical Pomona

Job Notes

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

Compliance Statement

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

Authorization



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Definitions/Glossary

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
^3+	Reporting Limit Check Standard is outside acceptance limits, high 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.

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: 380-158447-1

Job ID: 380-158447-1

Eurofins Eaton Analytical Pomona

Job Narrative 380-158447-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 7/3/2025 9:42 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The method reporting limit check (MRL) for preparation batch 570-593672 and analytical batch 570-598242 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported. Method: 8015B_DRO_LL_CS
Method 8015B_DRO_LL_CS: The spiking solution was inadvertently omitted during the extraction process for the laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) associated with preparation batch 570-593672; therefore, percent recoveries are unavailable. Due to expired holding times, the affected samples could not be re-prepared and/or re-analyzed, and the results have been reported. Method: 8015B_DRO_LL_CS. Data excluded due to this QC failure. (XWB4)

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

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Detection Summary

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

☐ No Detections.

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-2

☐ No Detections.

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: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

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		07/08/25 13:40	07/09/25 17:54	1
2,4'-DDD	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
2,4'-DDE	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
2,4'-DDT	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
2,4-Dinitrotoluene	<0.098	*1	0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
2,6-Dinitrotoluene	<0.098	*1	0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
2-Methylnaphthalene	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
4,4'-DDD	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
4,4'-DDE	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
4,4'-DDT	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Acenaphthene	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Acenaphthylene	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Acetochlor	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Alachlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
alpha-BHC	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
alpha-Chlordane	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Anthracene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 17:54	1
Atrazine	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Benz(a)anthracene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 17:54	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 17:54	1
Benzo[g,h,i]perylene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 17:54	1
beta-BHC	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59	ug/L		07/08/25 13:40	07/09/25 17:54	1
Bromacil	<0.098	*1	0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Butachlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Butylbenzylphthalate	<0.49		0.49	ug/L		07/08/25 13:40	07/09/25 17:54	1
Chlorobenzilate	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Chloroneb	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Chlorpyrifos	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Chrysene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 17:54	1
delta-BHC	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Di(2-ethylhexyl)adipate	<0.59		0.59	ug/L		07/08/25 13:40	07/09/25 17:54	1
Dibenz(a,h)anthracene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Diclorvos (DDVP)	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Dieldrin	<0.0098	^3+	0.0098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Diethylphthalate	<0.49		0.49	ug/L		07/08/25 13:40	07/09/25 17:54	1
Dimethylphthalate	<0.49		0.49	ug/L		07/08/25 13:40	07/09/25 17:54	1
Di-n-butyl phthalate	<0.98		0.98	ug/L		07/08/25 13:40	07/09/25 17:54	1
Di-n-octyl phthalate	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Endosulfan I (Alpha)	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Endosulfan II (Beta)	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Endosulfan sulfate	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Endrin	<0.0098		0.0098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Endrin aldehyde	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
EPTC	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Fluoranthene	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1

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Client Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

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		07/08/25 13:40	07/09/25 17:54	1
gamma-Chlordane	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Heptachlor	<0.0098		0.0098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Hexachlorobenzene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Hexachlorocyclopentadiene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Isophorone	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Lindane	<0.0098		0.0098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Malathion	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Methoxychlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Metolachlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Molinate	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Naphthalene	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Parathion	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Pendimethalin (Penoxaline)	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Phenanthrene	<0.039		0.039	ug/L		07/08/25 13:40	07/09/25 17:54	1
Propachlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Pyrene	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Simazine	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Terbacil	<0.098	*1	0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Terbutylazine	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Thiobencarb	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/08/25 13:40	07/09/25 17:54	1
trans-Nonachlor	<0.049		0.049	ug/L		07/08/25 13:40	07/09/25 17:54	1
Trifluralin	<0.098		0.098	ug/L		07/08/25 13:40	07/09/25 17:54	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/08/25 13:40	07/09/25 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	92		70 - 130	07/08/25 13:40	07/09/25 17:54	1
Perylene-d12	96		70 - 130	07/08/25 13:40	07/09/25 17:54	1
Triphenylphosphate	111		70 - 130	07/08/25 13:40	07/09/25 17:54	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		07/07/25 05:12	07/17/25 03:29	1
2-Methylnaphthalene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Acenaphthene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Acenaphthylene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Anthracene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Benzo[a]anthracene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Benzo[a]pyrene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Benzo[b]fluoranthene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Benzo[g,h,i]perylene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Benzo[k]fluoranthene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Chrysene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Dibenz(a,h)anthracene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Fluoranthene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1

Eurofins Eaton Analytical Pomona

Client Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

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		07/07/25 05:12	07/17/25 03:29	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Naphthalene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Phenanthrene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1
Pyrene	<0.19		0.19	ug/L		07/07/25 05:12	07/17/25 03:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	85		28 - 127	07/07/25 05:12	07/17/25 03:29	1
2-Fluorobiphenyl (Surr)	86		31 - 120	07/07/25 05:12	07/17/25 03:29	1
2-Fluorophenol (Surr)	46		17 - 120	07/07/25 05:12	07/17/25 03:29	1
Nitrobenzene-d5 (Surr)	89		27 - 120	07/07/25 05:12	07/17/25 03:29	1
Phenol-d6 (Surr)	29		10 - 120	07/07/25 05:12	07/17/25 03:29	1
p-Terphenyl-d14 (Surr)	86		45 - 120	07/07/25 05:12	07/17/25 03:29	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
2-Butenal, 3-methyl-	8.4	T J N	ug/L		2.79	107-86-8	07/07/25 05:12	07/17/25 14:46	1
Cyclohexane, 1,4-dimethyl-, trans-	12	T J N	ug/L		3.01	2207-04-7	07/07/25 05:12	07/17/25 14:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	78		33 - 139	07/07/25 05:12	07/17/25 14:46	1
2-Fluorobiphenyl (Surr)	84		33 - 126	07/07/25 05:12	07/17/25 14:46	1
2-Fluorophenol (Surr)	51		12 - 120	07/07/25 05:12	07/17/25 14:46	1
Nitrobenzene-d5 (Surr)	86		36 - 120	07/07/25 05:12	07/17/25 14:46	1
Phenol-d6 (Surr)	30		10 - 120	07/07/25 05:12	07/17/25 14:46	1
p-Terphenyl-d14 (Surr)	88		47 - 131	07/07/25 05:12	07/17/25 14:46	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			07/13/25 15:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69		38 - 134		07/13/25 15:53	1

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-2

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

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			07/13/25 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67		38 - 134		07/13/25 22:57	1

Action Limit Summary

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

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: 380-158447-1
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)				
380-158427-R-1-A MS	Matrix Spike	91	97	115				
380-158427-S-1-A MSD	Matrix Spike Duplicate	95	94	118				
380-158447-1	HALAWA SHAFT VIEWING POOL	92	96	111				
LCS 380-161526/23-A	Lab Control Sample	90	100	118				
LCSD 380-161526/24-A	Lab Control Sample Dup	93	99	113				
MB 380-161526/21-A	Method Blank	90	91	120				
MRL 380-161526/22-A	Lab Control Sample	93	97	115				
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)		
380-158447-1	HALAWA SHAFT VIEWING POC	78	84	51	86	30	88		
MB 570-593529/1-A	Method Blank	72	72	45	74	27	77		
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)		
380-158447-1	HALAWA SHAFT VIEWING POC	85	86	46	89	29	86		
570-237041-A-2-A MS	Matrix Spike	77	74	37	61	23	72		
570-237041-B-2-A MSD	Matrix Spike Duplicate	81	79	42	65	25	75		
LCS 570-593529/2-A	Lab Control Sample	89	86	53	74	35	88		
LCSD 570-593529/3-A	Lab Control Sample Dup	89	89	57	76	37	91		
MB 570-593529/1-A	Method Blank	71	70	39	73	24	76		
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: 380-158447-1
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)
380-158440-C-1 MS	Matrix Spike	86
380-158440-C-1 MSD	Matrix Spike Duplicate	85
380-158447-1	HALAWA SHAFT VIEWING POOL	69
380 158447 2	TB: HALAWA SHAFT VIEWING POOL	67
LCS 570-596498/4	Lab Control Sample	78
LCSD 570-596498/5	Lab Control Sample Dup	83
MB 570-596498/6	Method Blank	66
MRL 570-596498/3	Lab Control Sample	66
Surrogate Legend		
BFB = 4-Bromofluorobenzene (Surr)		

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-161526/21-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 161526

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2,4'-DDD	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2,4'-DDE	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2,4'-DDT	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2,4-Dinitrotoluene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2,6-Dinitrotoluene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
2-Methylnaphthalene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
4,4'-DDD	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
4,4'-DDE	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
4,4'-DDT	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Acenaphthene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Acenaphthylene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Acetochlor	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Alachlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
alpha-BHC	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
alpha-Chlordane	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Anthracene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 11:44	1
Atrazine	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Benz(a)anthracene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Benzo[a]pyrene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 11:44	1
Benzo[b]fluoranthene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 11:44	1
Benzo[g,h,i]perylene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Benzo[k]fluoranthene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 11:44	1
beta-BHC	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60	ug/L		07/08/25 13:40	07/09/25 11:44	1
Bromacil	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Butachlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Butylbenzylphthalate	<0.50		0.50	ug/L		07/08/25 13:40	07/09/25 11:44	1
Chlorobenzilate	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Chloroneb	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Chlorpyrifos	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Chrysene	<0.020		0.020	ug/L		07/08/25 13:40	07/09/25 11:44	1
delta-BHC	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Di(2-ethylhexyl)adipate	<0.60		0.60	ug/L		07/08/25 13:40	07/09/25 11:44	1
Dibenz(a,h)anthracene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Diclorvos (DDVP)	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Dieldrin	<0.0099	^3+	0.0099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Diethylphthalate	<0.50		0.50	ug/L		07/08/25 13:40	07/09/25 11:44	1
Dimethylphthalate	<0.50		0.50	ug/L		07/08/25 13:40	07/09/25 11:44	1
Di-n-butyl phthalate	<0.99		0.99	ug/L		07/08/25 13:40	07/09/25 11:44	1
Di-n-octyl phthalate	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Endosulfan I (Alpha)	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Endosulfan II (Beta)	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Endosulfan sulfate	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Endrin	<0.0099		0.0099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Endrin aldehyde	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
EPTC	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1

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QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 380-161526/21-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 161526

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Fluorene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
gamma-Chlordane	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Heptachlor	<0.0099		0.0099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Hexachlorobenzene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Hexachlorocyclopentadiene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Isophorone	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Lindane	<0.0099		0.0099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Malathion	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Methoxychlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Metolachlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Molinate	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Naphthalene	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Parathion	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Pendimethalin (Penoxaline)	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Phenanthrene	<0.040		0.040	ug/L		07/08/25 13:40	07/09/25 11:44	1
Propachlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Pyrene	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Simazine	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Terbacil	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Terbutylazine	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Thiobencarb	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1
Total Permethrin (mixed isomers)	<0.20		0.20	ug/L		07/08/25 13:40	07/09/25 11:44	1
trans-Nonachlor	<0.050		0.050	ug/L		07/08/25 13:40	07/09/25 11:44	1
Trifluralin	<0.099		0.099	ug/L		07/08/25 13:40	07/09/25 11:44	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Cyclopentene, 1,2,3,4,5-pentamethyl-	0.826	T J N	ug/L		2.52	1000154-28-6	07/08/25 13:40	07/09/25 11:44	1
Decane	2.61	T J N	ug/L		2.77	124-18-5	07/08/25 13:40	07/09/25 11:44	1
Cyclohexasiloxane, dodecamethyl-	0.859	T J N	ug/L		3.87	540-97-6	07/08/25 13:40	07/09/25 11:44	1
9-Octadecenamide, (Z)-	1.63	T J N	ug/L		7.90	301-02-0	07/08/25 13:40	07/09/25 11:44	1
13-Docosenamide, (Z)-	1.11	T J N	ug/L		10.45	112-84-5	07/08/25 13:40	07/09/25 11:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Nitro-m-xylene	90		70 - 130	07/08/25 13:40	07/09/25 11:44	1
Perylene-d12	91		70 - 130	07/08/25 13:40	07/09/25 11:44	1
Triphenylphosphate	120		70 - 130	07/08/25 13:40	07/09/25 11:44	1

Lab Sample ID: LCS 380-161526/23-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.99	1.87		ug/L		94	70 - 130
2,4'-DDD	1.99	2.32		ug/L		117	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-161526/23-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDE	1.99	2.15		ug/L		108	70 - 130
2,4'-DDT	1.99	2.16		ug/L		108	70 - 130
2,4-Dinitrotoluene	1.99	1.71		ug/L		86	70 - 130
2,6-Dinitrotoluene	1.99	1.46		ug/L		73	70 - 130
2-Methylnaphthalene	1.99	1.90		ug/L		95	70 - 130
4,4'-DDD	1.99	2.29		ug/L		115	70 - 130
4,4'-DDE	1.99	2.29		ug/L		115	70 - 130
4,4'-DDT	1.99	2.13		ug/L		107	70 - 130
Acenaphthene	1.99	1.88		ug/L		95	70 - 130
Acenaphthylene	1.99	2.00		ug/L		100	70 - 130
Acetochlor	1.99	2.09		ug/L		105	70 - 130
Alachlor	1.99	2.11		ug/L		106	70 - 130
alpha-BHC	1.99	1.98		ug/L		99	70 - 130
alpha-Chlordane	1.99	2.42		ug/L		122	70 - 130
Anthracene	1.99	1.99		ug/L		100	70 - 130
Atrazine	1.99	2.14		ug/L		107	70 - 130
Benz(a)anthracene	1.99	2.18		ug/L		110	70 - 130
Benzo[a]pyrene	1.99	2.20		ug/L		110	70 - 130
Benzo[b]fluoranthene	1.99	2.18		ug/L		109	70 - 130
Benzo[g,h,i]perylene	1.99	1.95		ug/L		98	70 - 130
Benzo[k]fluoranthene	1.99	2.17		ug/L		109	70 - 130
beta-BHC	1.99	1.97		ug/L		99	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	1.89		ug/L		95	70 - 130
Bromacil	1.99	1.64		ug/L		82	70 - 130
Butachlor	1.99	2.09		ug/L		105	70 - 130
Butylbenzylphthalate	1.99	2.07		ug/L		104	70 - 130
Chlorobenzilate	1.99	1.92		ug/L		96	70 - 130
Chloroneb	1.99	1.96		ug/L		98	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.27		ug/L		114	70 - 130
Chlorpyrifos	1.99	2.20		ug/L		111	70 - 130
Chrysene	1.99	1.96		ug/L		98	70 - 130
delta-BHC	1.99	1.84		ug/L		92	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.09		ug/L		105	70 - 130
Dibenz(a,h)anthracene	1.99	2.01		ug/L		101	70 - 130
Diclorvos (DDVP)	1.99	1.69		ug/L		85	70 - 130
Dieldrin	1.99	2.05		ug/L		103	70 - 130
Diethylphthalate	1.99	2.09		ug/L		105	70 - 130
Dimethylphthalate	1.99	1.88		ug/L		94	70 - 130
Di-n-butyl phthalate	3.98	4.80		ug/L		120	70 - 130
Di-n-octyl phthalate	1.99	2.06		ug/L		104	70 - 130
Endosulfan I (Alpha)	1.99	1.93		ug/L		97	70 - 130
Endosulfan II (Beta)	1.99	1.95		ug/L		98	70 - 130
Endosulfan sulfate	1.99	2.00		ug/L		101	70 - 130
Endrin	1.99	2.36		ug/L		119	70 - 130
Endrin aldehyde	1.99	2.33		ug/L		117	60 - 130
EPTC	1.99	2.01		ug/L		101	70 - 130
Fluoranthene	1.99	2.22		ug/L		111	70 - 130
Fluorene	1.99	2.05		ug/L		103	70 - 130
gamma-Chlordane	1.99	2.35		ug/L		118	70 - 130

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QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 380-161526/23-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Heptachlor	1.99	2.34		ug/L		118	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.32		ug/L		116	70 - 130
Hexachlorobenzene	1.99	2.13		ug/L		107	70 - 130
Hexachlorocyclopentadiene	1.99	2.43		ug/L		122	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	2.30		ug/L		115	70 - 130
Isophorone	1.99	1.90		ug/L		96	70 - 130
Lindane	1.99	2.12		ug/L		106	70 - 130
Malathion	1.99	2.17		ug/L		109	70 - 130
Methoxychlor	1.99	2.21		ug/L		111	70 - 130
Metolachlor	1.99	2.19		ug/L		110	70 - 130
Molinate	1.99	2.03		ug/L		102	70 - 130
Naphthalene	1.99	1.86		ug/L		93	70 - 130
Parathion	1.99	1.94		ug/L		97	70 - 130
Pendimethalin (Penoxaline)	1.99	2.44		ug/L		122	70 - 130
Phenanthrene	1.99	1.89		ug/L		95	70 - 130
Propachlor	1.99	2.00		ug/L		101	70 - 130
Pyrene	1.99	2.25		ug/L		113	70 - 130
Simazine	1.99	1.83		ug/L		92	70 - 130
Terbacil	1.99	1.60		ug/L		80	70 - 130
Terbutylazine	1.99	2.17		ug/L		109	70 - 130
Thiobencarb	1.99	2.13		ug/L		107	70 - 130
trans-Nonachlor	1.99	2.51		ug/L		126	70 - 130
Trifluralin	1.99	2.34		ug/L		118	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Nitro-m-xylene	90		70 - 130
Perylene-d12	100		70 - 130
Triphenylphosphate	118		70 - 130

Lab Sample ID: LCSD 380-161526/24-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	1.98	1.90		ug/L		96	70 - 130	2	20
2,4'-DDD	1.98	2.22		ug/L		112	70 - 130	4	20
2,4'-DDE	1.98	2.06		ug/L		104	70 - 130	4	20
2,4'-DDT	1.98	2.07		ug/L		104	70 - 130	4	20
2,4-Dinitrotoluene	1.98	2.21	*1	ug/L		111	70 - 130	26	20
2,6-Dinitrotoluene	1.98	1.93	*1	ug/L		97	70 - 130	28	20
2-Methylnaphthalene	1.98	1.89		ug/L		95	70 - 130	1	20
4,4'-DDD	1.98	2.19		ug/L		110	70 - 130	4	20
4,4'-DDE	1.98	2.21		ug/L		111	70 - 130	4	20
4,4'-DDT	1.98	2.03		ug/L		103	70 - 130	4	20
Acenaphthene	1.98	1.88		ug/L		95	70 - 130	0	20
Acenaphthylene	1.98	1.95		ug/L		98	70 - 130	3	20
Acetochlor	1.98	2.06		ug/L		104	70 - 130	1	20
Alachlor	1.98	2.07		ug/L		104	70 - 130	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-161526/24-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	1.98	1.90		ug/L		96	70 - 130	4	20
alpha-Chlordane	1.98	2.40		ug/L		121	70 - 130	1	20
Anthracene	1.98	1.94		ug/L		98	70 - 130	3	20
Atrazine	1.98	2.12		ug/L		107	70 - 130	1	20
Benz(a)anthracene	1.98	2.04		ug/L		103	70 - 130	7	20
Benzo[a]pyrene	1.98	2.19		ug/L		110	70 - 130	0	20
Benzo[b]fluoranthene	1.98	2.17		ug/L		109	70 - 130	1	20
Benzo[g,h,i]perylene	1.98	1.99		ug/L		100	70 - 130	2	20
Benzo[k]fluoranthene	1.98	2.13		ug/L		108	70 - 130	2	20
beta-BHC	1.98	1.92		ug/L		97	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	1.98	1.90		ug/L		96	70 - 130	0	20
Bromacil	1.98	2.06	*1	ug/L		104	70 - 130	23	20
Butachlor	1.98	2.07		ug/L		105	70 - 130	1	20
Butylbenzylphthalate	1.98	1.99		ug/L		100	70 - 130	4	20
Chlorobenzilate	1.98	1.85		ug/L		93	70 - 130	4	20
Chloroneb	1.98	1.95		ug/L		98	70 - 130	1	20
Chlorothalonil (Draconil, Bravo)	1.98	2.14		ug/L		108	70 - 130	6	20
Chlorpyrifos	1.98	2.15		ug/L		108	70 - 130	2	20
Chrysene	1.98	2.00		ug/L		101	70 - 130	2	20
delta-BHC	1.98	1.80		ug/L		91	70 - 130	2	20
Di(2-ethylhexyl)adipate	1.98	1.99		ug/L		100	70 - 130	5	20
Dibenz(a,h)anthracene	1.98	2.08		ug/L		105	70 - 130	3	20
Diclorvos (DDVP)	1.98	1.98		ug/L		100	70 - 130	16	20
Dieldrin	1.98	2.02		ug/L		102	70 - 130	1	20
Diethylphthalate	1.98	2.06		ug/L		104	70 - 130	2	20
Dimethylphthalate	1.98	2.06		ug/L		104	70 - 130	9	20
Di-n-butyl phthalate	3.97	4.62		ug/L		117	70 - 130	4	20
Di-n-octyl phthalate	1.98	2.05		ug/L		103	70 - 130	1	20
Endosulfan I (Alpha)	1.98	1.93		ug/L		97	70 - 130	0	20
Endosulfan II (Beta)	1.98	1.89		ug/L		95	70 - 130	3	20
Endosulfan sulfate	1.98	1.99		ug/L		100	70 - 130	1	20
Endrin	1.98	2.29		ug/L		115	70 - 130	3	20
Endrin aldehyde	1.98	2.30		ug/L		116	60 - 130	2	20
EPTC	1.98	2.03		ug/L		102	70 - 130	1	20
Fluoranthene	1.98	2.13		ug/L		108	70 - 130	4	20
Fluorene	1.98	1.97		ug/L		100	70 - 130	4	20
gamma-Chlordane	1.98	2.37		ug/L		119	70 - 130	1	20
Heptachlor	1.98	2.35		ug/L		119	70 - 130	0	20
Heptachlor epoxide (isomer B)	1.98	2.33		ug/L		117	70 - 130	0	20
Hexachlorobenzene	1.98	2.07		ug/L		104	70 - 130	3	20
Hexachlorocyclopentadiene	1.98	2.31		ug/L		117	70 - 130	5	20
Indeno[1,2,3-cd]pyrene	1.98	2.29		ug/L		115	70 - 130	1	20
Isophorone	1.98	2.14		ug/L		108	70 - 130	12	20
Lindane	1.98	2.11		ug/L		106	70 - 130	0	20
Malathion	1.98	2.08		ug/L		105	70 - 130	4	20
Methoxychlor	1.98	2.22		ug/L		112	70 - 130	0	20
Metolachlor	1.98	2.19		ug/L		110	70 - 130	0	20
Molinate	1.98	2.03		ug/L		103	70 - 130	0	20
Naphthalene	1.98	1.90		ug/L		96	70 - 130	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCSD 380-161526/24-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Parathion	1.98	1.87		ug/L		94	70 - 130	3	20
Pendimethalin (Penoxaline)	1.98	2.35		ug/L		119	70 - 130	4	20
Phenanthrene	1.98	1.86		ug/L		94	70 - 130	1	20
Propachlor	1.98	1.99		ug/L		101	70 - 130	0	20
Pyrene	1.98	2.16		ug/L		109	70 - 130	4	20
Simazine	1.98	1.95		ug/L		98	70 - 130	6	20
Terbacil	1.98	2.02	*1	ug/L		102	70 - 130	23	20
Terbutylazine	1.98	2.04		ug/L		103	70 - 130	6	20
Thiobencarb	1.98	2.05		ug/L		103	70 - 130	4	20
trans-Nonachlor	1.98	2.51		ug/L		127	70 - 130	0	20
Trifluralin	1.98	2.33		ug/L		117	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	99		70 - 130
Triphenylphosphate	113		70 - 130

Lab Sample ID: MRL 380-161526/22-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0992	0.115		ug/L		115	50 - 150
2,4'-DDD	0.0992	0.102		ug/L		102	50 - 150
2,4'-DDE	0.0992	0.107		ug/L		108	50 - 150
2,4'-DDT	0.0992	0.129		ug/L		130	50 - 150
2,4-Dinitrotoluene	0.0992	0.117		ug/L		118	50 - 150
2,6-Dinitrotoluene	0.0992	0.124		ug/L		125	50 - 150
2-Methylnaphthalene	0.0992	0.105		ug/L		106	50 - 150
4,4'-DDD	0.0992	0.111		ug/L		112	50 - 150
4,4'-DDE	0.0992	0.107		ug/L		107	50 - 150
4,4'-DDT	0.0992	0.132		ug/L		133	50 - 150
Acenaphthene	0.0992	0.0996		ug/L		100	50 - 150
Acenaphthylene	0.0992	0.0935	J	ug/L		94	50 - 150
Acetochlor	0.0992	0.106		ug/L		107	50 - 150
Alachlor	0.0496	0.0557		ug/L		112	50 - 150
alpha-BHC	0.0992	0.0982	J	ug/L		99	50 - 150
alpha-Chlordane	0.0248	0.0308	J	ug/L		124	50 - 150
Anthracene	0.0198	0.0233		ug/L		118	50 - 150
Atrazine	0.0496	0.0643		ug/L		130	50 - 150
Benz(a)anthracene	0.0496	0.0606		ug/L		122	50 - 150
Benzo[a]pyrene	0.0198	0.0268		ug/L		135	50 - 150
Benzo[b]fluoranthene	0.0198	0.0276		ug/L		139	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0563		ug/L		114	50 - 150
Benzo[k]fluoranthene	0.0198	0.0277		ug/L		140	50 - 150
beta-BHC	0.0992	0.106		ug/L		107	50 - 150
Bis(2-ethylhexyl) phthalate	0.595	0.549	J	ug/L		92	50 - 150
Bromacil	0.0992	0.132		ug/L		133	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-161526/22-A

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Butachlor	0.0496	0.0641		ug/L		129	50 - 150
Butylbenzylphthalate	0.496	0.563		ug/L		113	50 - 150
Chlorobenzilate	0.0992	0.112		ug/L		112	50 - 150
Chloroneb	0.0992	0.102		ug/L		102	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0992	0.0976	J	ug/L		98	50 - 150
Chlorpyrifos	0.0496	0.0529		ug/L		107	50 - 150
Chrysene	0.0198	0.0223		ug/L		112	50 - 150
delta-BHC	0.0992	0.0901	J	ug/L		91	50 - 150
Di(2-ethylhexyl)adipate	0.595	0.634		ug/L		107	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0575		ug/L		116	50 - 150
Diclorvos (DDVP)	0.0496	0.0552		ug/L		111	50 - 150
Dieldrin	0.00992	0.0152	^3+	ug/L		153	50 - 150
Diethylphthalate	0.496	0.546		ug/L		110	50 - 150
Dimethylphthalate	0.496	0.513		ug/L		103	50 - 150
Di-n-butyl phthalate	0.496	1.02		ug/L		205	49 - 243
Di-n-octyl phthalate	0.0992	0.103		ug/L		104	50 - 150
Endosulfan I (Alpha)	0.0992	0.0877	J	ug/L		88	50 - 150
Endosulfan II (Beta)	0.0992	0.101		ug/L		102	50 - 150
Endosulfan sulfate	0.0992	0.123		ug/L		124	50 - 150
Endrin	0.00992	0.0135		ug/L		136	50 - 150
Endrin aldehyde	0.0992	0.144		ug/L		145	50 - 150
EPTC	0.0992	0.0982	J	ug/L		99	50 - 150
Fluoranthene	0.0992	0.109		ug/L		109	50 - 150
Fluorene	0.0496	0.0520		ug/L		105	50 - 150
gamma-Chlordane	0.0248	0.0296	J	ug/L		119	50 - 150
Heptachlor	0.00992	0.0127		ug/L		128	50 - 150
Heptachlor epoxide (isomer B)	0.00992	0.0120		ug/L		121	50 - 150
Hexachlorobenzene	0.0496	0.0520		ug/L		105	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0582		ug/L		117	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0659		ug/L		133	50 - 150
Isophorone	0.0992	0.119		ug/L		120	50 - 150
Lindane	0.00992	0.0124		ug/L		125	50 - 150
Malathion	0.0992	0.121		ug/L		122	50 - 150
Methoxychlor	0.0496	0.0670		ug/L		135	50 - 150
Metolachlor	0.0496	0.0614		ug/L		124	50 - 150
Molinate	0.0992	0.104		ug/L		105	50 - 150
Naphthalene	0.0992	0.0964	J	ug/L		97	50 - 150
Parathion	0.0992	0.104		ug/L		105	50 - 150
Pendimethalin (Penoxaline)	0.0992	0.140		ug/L		142	50 - 150
Phenanthrene	0.0397	0.0443		ug/L		112	50 - 150
Propachlor	0.0496	0.0574		ug/L		116	50 - 150
Pyrene	0.0496	0.0555		ug/L		112	50 - 150
Simazine	0.0496	0.0614		ug/L		124	50 - 150
Terbacil	0.0992	0.118		ug/L		119	50 - 150
Terbutylazine	0.0992	0.120		ug/L		121	50 - 150
Thiobencarb	0.0992	0.103		ug/L		104	50 - 150
trans-Nonachlor	0.0248	0.0297	J	ug/L		120	50 - 150
Trifluralin	0.0992	0.140		ug/L		141	50 - 150

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 380-161526/22-A
Matrix: Water
Analysis Batch: 161686

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 161526

Surrogate	MRL %Recovery	MRL Qualifier	Limits
2-Nitro-m-xylene	93		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: 380-158427-R-1-A MS
Matrix: Water
Analysis Batch: 161686

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 161526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.097		1.97	1.88		ug/L		95	70 - 130
2,4'-DDD	<0.097		1.97	2.22		ug/L		113	70 - 130
2,4'-DDE	<0.097		1.97	2.08		ug/L		105	70 - 130
2,4'-DDT	<0.097		1.97	2.09		ug/L		106	70 - 130
2,4-Dinitrotoluene	<0.097	*1	1.97	1.81		ug/L		92	70 - 130
2,6-Dinitrotoluene	<0.097	*1	1.97	1.54		ug/L		78	70 - 130
2-Methylnaphthalene	<0.097		1.97	1.92		ug/L		97	70 - 130
4,4'-DDD	<0.097		1.97	2.24		ug/L		113	70 - 130
4,4'-DDE	<0.097		1.97	2.23		ug/L		113	70 - 130
4,4'-DDT	<0.097		1.97	2.03		ug/L		103	70 - 130
Acenaphthene	<0.097		1.97	1.89		ug/L		96	70 - 130
Acenaphthylene	<0.097		1.97	2.08		ug/L		106	70 - 130
Acetochlor	<0.097		1.97	1.99		ug/L		101	70 - 130
Alachlor	<0.049		1.97	2.05		ug/L		104	70 - 130
alpha-BHC	<0.097		1.97	1.94		ug/L		98	70 - 130
alpha-Chlordane	<0.049		1.97	2.33		ug/L		118	70 - 130
Anthracene	<0.019	F1	1.97	1.42		ug/L		72	70 - 130
Atrazine	<0.049		1.97	2.11		ug/L		107	70 - 130
Benz(a)anthracene	<0.049		1.97	2.05		ug/L		104	70 - 130
Benzo[a]pyrene	<0.019		1.97	2.14		ug/L		108	70 - 130
Benzo[b]fluoranthene	<0.019		1.97	2.21		ug/L		112	70 - 130
Benzo[g,h,i]perylene	<0.049		1.97	1.94		ug/L		98	70 - 130
Benzo[k]fluoranthene	<0.019		1.97	2.14		ug/L		109	70 - 130
beta-BHC	<0.097		1.97	1.93		ug/L		98	70 - 130
Bis(2-ethylhexyl) phthalate	<0.58		1.97	1.86		ug/L		94	70 - 130
Bromacil	<0.097	*1	1.97	1.74		ug/L		88	70 - 130
Butachlor	<0.049		1.97	2.05		ug/L		104	70 - 130
Butylbenzylphthalate	<0.49		1.97	2.02		ug/L		102	70 - 130
Chlorobenzilate	<0.097		1.97	1.90		ug/L		96	70 - 130
Chloroneb	<0.097		1.97	1.96		ug/L		100	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.097		1.97	2.19		ug/L		111	70 - 130
Chlorpyrifos	<0.049		1.97	2.11		ug/L		107	70 - 130
Chrysene	<0.019		1.97	2.01		ug/L		102	70 - 130
delta-BHC	<0.097		1.97	1.78		ug/L		90	70 - 130
Di(2-ethylhexyl)adipate	<0.58		1.97	1.98		ug/L		100	70 - 130
Dibenz(a,h)anthracene	<0.049		1.97	2.02		ug/L		103	70 - 130
Diclorvos (DDVP)	<0.049		1.97	1.77		ug/L		90	70 - 130
Dieldrin	<0.0097	^3+	1.97	2.00		ug/L		101	70 - 130
Diethylphthalate	<0.49		1.97	2.08		ug/L		105	70 - 130

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-158427-R-1-A MS

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dimethylphthalate	<0.49		1.97	1.91		ug/L		97	70 - 130
Di-n-butyl phthalate	<0.97		3.95	4.80		ug/L		111	70 - 130
Di-n-octyl phthalate	<0.097		1.97	1.99		ug/L		101	70 - 130
Endosulfan I (Alpha)	<0.097		1.97	1.87		ug/L		95	70 - 130
Endosulfan II (Beta)	<0.097		1.97	1.89		ug/L		96	70 - 130
Endosulfan sulfate	<0.097		1.97	1.93		ug/L		98	70 - 130
Endrin	<0.0097		1.97	2.31		ug/L		117	70 - 130
Endrin aldehyde	<0.097		1.97	2.02		ug/L		103	60 - 130
EPTC	<0.097		1.97	2.03		ug/L		103	70 - 130
Fluoranthene	<0.097		1.97	2.16		ug/L		110	70 - 130
Fluorene	<0.049		1.97	2.02		ug/L		102	70 - 130
gamma-Chlordane	<0.049		1.97	2.29		ug/L		116	70 - 130
Heptachlor	<0.0097		1.97	2.31		ug/L		117	70 - 130
Heptachlor epoxide (isomer B)	<0.0097		1.97	2.28		ug/L		116	70 - 130
Hexachlorobenzene	<0.049		1.97	2.12		ug/L		107	70 - 130
Hexachlorocyclopentadiene	<0.049		1.97	2.43		ug/L		123	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.97	2.24		ug/L		113	70 - 130
Isophorone	<0.097		1.97	1.95		ug/L		99	70 - 130
Lindane	<0.0097		1.97	2.09		ug/L		106	70 - 130
Malathion	<0.097		1.97	2.09		ug/L		106	70 - 130
Methoxychlor	<0.049		1.97	2.29		ug/L		116	70 - 130
Metolachlor	<0.049		1.97	2.13		ug/L		108	70 - 130
Molinate	<0.097		1.97	2.04		ug/L		103	70 - 130
Naphthalene	<0.097		1.97	1.88		ug/L		95	70 - 130
Parathion	<0.097		1.97	1.85		ug/L		94	70 - 130
Pendimethalin (Penoxaline)	<0.097		1.97	2.43		ug/L		123	70 - 130
Phenanthrene	<0.039		1.97	1.85		ug/L		94	70 - 130
Propachlor	<0.049		1.97	1.96		ug/L		99	70 - 130
Pyrene	<0.049		1.97	2.19		ug/L		111	70 - 130
Simazine	<0.049		1.97	1.83		ug/L		93	70 - 130
Terbacil	<0.097	*1	1.97	1.68		ug/L		85	70 - 130
Terbutylazine	<0.097		1.97	2.14		ug/L		108	70 - 130
Thiobencarb	<0.097		1.97	2.07		ug/L		105	70 - 130
trans-Nonachlor	<0.049		1.97	2.41		ug/L		122	70 - 130
Trifluralin	<0.097		1.97	2.33		ug/L		118	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Nitro-m-xylene	91		70 - 130
Perylene-d12	97		70 - 130
Triphenylphosphate	115		70 - 130

Lab Sample ID: 380-158427-S-1-A MSD

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.097		1.94	1.88		ug/L		96	70 - 130	0	20
2,4'-DDD	<0.097		1.94	2.24		ug/L		116	70 - 130	1	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-158427-S-1-A MSD

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDE	<0.097		1.94	2.07		ug/L		107	70 - 130	0	20
2,4'-DDT	<0.097		1.94	2.13		ug/L		110	70 - 130	2	20
2,4-Dinitrotoluene	<0.097	*1	1.94	2.18		ug/L		112	70 - 130	18	20
2,6-Dinitrotoluene	<0.097	*1	1.94	1.88		ug/L		97	70 - 130	20	20
2-Methylnaphthalene	<0.097		1.94	1.89		ug/L		97	70 - 130	2	20
4,4'-DDD	<0.097		1.94	2.21		ug/L		114	70 - 130	1	20
4,4'-DDE	<0.097		1.94	2.21		ug/L		114	70 - 130	1	20
4,4'-DDT	<0.097		1.94	2.04		ug/L		105	70 - 130	0	20
Acenaphthene	<0.097		1.94	1.87		ug/L		97	70 - 130	1	20
Acenaphthylene	<0.097		1.94	1.95		ug/L		100	70 - 130	7	20
Acetochlor	<0.097		1.94	2.03		ug/L		105	70 - 130	2	20
Alachlor	<0.049		1.94	2.06		ug/L		106	70 - 130	0	20
alpha-BHC	<0.097		1.94	1.90		ug/L		98	70 - 130	2	20
alpha-Chlordane	<0.049		1.94	2.36		ug/L		122	70 - 130	1	20
Anthracene	<0.019	F1	1.94	1.34	F1	ug/L		69	70 - 130	6	20
Atrazine	<0.049		1.94	2.12		ug/L		110	70 - 130	0	20
Benz(a)anthracene	<0.049		1.94	2.02		ug/L		104	70 - 130	1	20
Benzo[a]pyrene	<0.019		1.94	2.02		ug/L		104	70 - 130	6	20
Benzo[b]fluoranthene	<0.019		1.94	2.18		ug/L		113	70 - 130	1	20
Benzo[g,h,i]perylene	<0.049		1.94	1.94		ug/L		100	70 - 130	0	20
Benzo[k]fluoranthene	<0.019		1.94	2.05		ug/L		106	70 - 130	4	20
beta-BHC	<0.097		1.94	1.90		ug/L		98	70 - 130	2	20
Bis(2-ethylhexyl) phthalate	<0.58		1.94	1.91		ug/L		98	70 - 130	2	20
Bromacil	<0.097	*1	1.94	2.09		ug/L		108	70 - 130	18	20
Butachlor	<0.049		1.94	2.08		ug/L		107	70 - 130	2	20
Butylbenzylphthalate	<0.49		1.94	1.99		ug/L		103	70 - 130	1	20
Chlorobenzilate	<0.097		1.94	1.91		ug/L		99	70 - 130	1	20
Chloroneb	<0.097		1.94	1.94		ug/L		100	70 - 130	1	20
Chlorothalonil (Draconil, Bravo)	<0.097		1.94	2.16		ug/L		112	70 - 130	1	20
Chlorpyrifos	<0.049		1.94	2.11		ug/L		109	70 - 130	0	20
Chrysene	<0.019		1.94	1.95		ug/L		100	70 - 130	3	20
delta-BHC	<0.097		1.94	1.78		ug/L		92	70 - 130	0	20
Di(2-ethylhexyl)adipate	<0.58		1.94	2.01		ug/L		103	70 - 130	1	20
Dibenz(a,h)anthracene	<0.049		1.94	2.07		ug/L		107	70 - 130	2	20
Diclorvos (DDVP)	<0.049		1.94	1.93		ug/L		100	70 - 130	9	20
Dieldrin	<0.0097	^3+	1.94	2.06		ug/L		106	70 - 130	3	20
Diethylphthalate	<0.49		1.94	2.03		ug/L		105	70 - 130	2	20
Dimethylphthalate	<0.49		1.94	2.02		ug/L		104	70 - 130	6	20
Di-n-butyl phthalate	<0.97		3.88	4.62		ug/L		108	70 - 130	4	20
Di-n-octyl phthalate	<0.097		1.94	2.03		ug/L		105	70 - 130	2	20
Endosulfan I (Alpha)	<0.097		1.94	1.90		ug/L		98	70 - 130	1	20
Endosulfan II (Beta)	<0.097		1.94	1.87		ug/L		96	70 - 130	1	20
Endosulfan sulfate	<0.097		1.94	2.00		ug/L		103	70 - 130	3	20
Endrin	<0.0097		1.94	2.36		ug/L		122	70 - 130	2	20
Endrin aldehyde	<0.097		1.94	2.05		ug/L		106	60 - 130	1	20
EPTC	<0.097		1.94	2.00		ug/L		103	70 - 130	1	20
Fluoranthene	<0.097		1.94	2.12		ug/L		109	70 - 130	2	20
Fluorene	<0.049		1.94	1.99		ug/L		103	70 - 130	2	20
gamma-Chlordane	<0.049		1.94	2.32		ug/L		120	70 - 130	1	20

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 380-158427-S-1-A MSD

Matrix: Water

Analysis Batch: 161686

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 161526

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Heptachlor	<0.0097		1.94	2.32		ug/L		120	70 - 130	1	20
Heptachlor epoxide (isomer B)	<0.0097		1.94	2.27		ug/L		117	70 - 130	1	20
Hexachlorobenzene	<0.049		1.94	2.09		ug/L		108	70 - 130	1	20
Hexachlorocyclopentadiene	<0.049		1.94	2.31		ug/L		119	70 - 130	5	20
Indeno[1,2,3-cd]pyrene	<0.049		1.94	2.25		ug/L		116	70 - 130	0	20
Isophorone	<0.097		1.94	2.11		ug/L		109	70 - 130	8	20
Lindane	<0.0097		1.94	2.03		ug/L		105	70 - 130	3	20
Malathion	<0.097		1.94	2.10		ug/L		108	70 - 130	1	20
Methoxychlor	<0.049		1.94	2.25		ug/L		116	70 - 130	2	20
Metolachlor	<0.049		1.94	2.18		ug/L		112	70 - 130	2	20
Molinate	<0.097		1.94	2.02		ug/L		104	70 - 130	1	20
Naphthalene	<0.097		1.94	1.87		ug/L		97	70 - 130	0	20
Parathion	<0.097		1.94	1.80		ug/L		93	70 - 130	2	20
Pendimethalin (Penoxaline)	<0.097		1.94	2.36		ug/L		122	70 - 130	3	20
Phenanthrene	<0.039		1.94	1.82		ug/L		94	70 - 130	1	20
Propachlor	<0.049		1.94	1.98		ug/L		102	70 - 130	1	20
Pyrene	<0.049		1.94	2.15		ug/L		111	70 - 130	2	20
Simazine	<0.049		1.94	1.98		ug/L		102	70 - 130	8	20
Terbacil	<0.097	*1	1.94	1.93		ug/L		100	70 - 130	14	20
Terbutylazine	<0.097		1.94	2.08		ug/L		107	70 - 130	3	20
Thiobencarb	<0.097		1.94	2.02		ug/L		104	70 - 130	3	20
trans-Nonachlor	<0.049		1.94	2.47		ug/L		127	70 - 130	2	20
Trifluralin	<0.097		1.94	2.32		ug/L		120	70 - 130	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Nitro-m-xylene	95		70 - 130
Perylene-d12	94		70 - 130
Triphenylphosphate	118		70 - 130

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

Lab Sample ID: MB 570-593529/1-A

Matrix: Water

Analysis Batch: 598423

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 593529

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L			N/A	07/07/25 05:12	07/17/25 10:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	72		33 - 139	07/07/25 05:12	07/17/25 10:52	1
2-Fluorobiphenyl (Surr)	72		33 - 126	07/07/25 05:12	07/17/25 10:52	1
2-Fluorophenol (Surr)	45		12 - 120	07/07/25 05:12	07/17/25 10:52	1
Nitrobenzene-d5 (Surr)	74		36 - 120	07/07/25 05:12	07/17/25 10:52	1
Phenol-d6 (Surr)	27		10 - 120	07/07/25 05:12	07/17/25 10:52	1
p-Terphenyl-d14 (Surr)	77		47 - 131	07/07/25 05:12	07/17/25 10:52	1

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MB 570-593529/1-A

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 593529

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
2-Methylnaphthalene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Acenaphthene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Acenaphthylene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Anthracene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Benzo[a]anthracene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Benzo[a]pyrene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Chrysene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Fluoranthene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Fluorene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Naphthalene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Phenanthrene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1
Pyrene	<0.20		0.20	ug/L		07/07/25 05:12	07/16/25 21:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	71		28 - 127	07/07/25 05:12	07/16/25 21:30	1
2-Fluorobiphenyl (Surr)	70		31 - 120	07/07/25 05:12	07/16/25 21:30	1
2-Fluorophenol (Surr)	39		17 - 120	07/07/25 05:12	07/16/25 21:30	1
Nitrobenzene-d5 (Surr)	73		27 - 120	07/07/25 05:12	07/16/25 21:30	1
Phenol-d6 (Surr)	24		10 - 120	07/07/25 05:12	07/16/25 21:30	1
p-Terphenyl-d14 (Surr)	76		45 - 120	07/07/25 05:12	07/16/25 21:30	1

Lab Sample ID: LCS 570-593529/2-A

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	14.7		ug/L		73	47 - 120
2-Methylnaphthalene	20.0	14.1		ug/L		71	43 - 120
Acenaphthene	20.0	17.4		ug/L		87	60 - 132
Acenaphthylene	20.0	17.6		ug/L		88	54 - 126
Anthracene	20.0	18.2		ug/L		91	43 - 120
Benzo[a]anthracene	20.0	17.7		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	17.9		ug/L		90	32 - 148
Benzo[b]fluoranthene	20.0	18.0		ug/L		90	42 - 140
Benzo[g,h,i]perylene	20.0	17.4		ug/L		87	1 - 195
Benzo[k]fluoranthene	20.0	17.9		ug/L		89	25 - 146
Chrysene	20.0	18.0		ug/L		90	44 - 140
Dibenz(a,h)anthracene	20.0	17.9		ug/L		89	1 - 200
Fluoranthene	20.0	17.9		ug/L		90	43 - 121
Fluorene	20.0	17.8		ug/L		89	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	16.1		ug/L		81	1 - 151
Naphthalene	20.0	14.4		ug/L		72	36 - 120

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: LCS 570-593529/2-A

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	20.0	17.7		ug/L		88	65 - 120
Pyrene	20.0	19.0		ug/L		95	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	89		28 - 127
2-Fluorobiphenyl (Surr)	86		31 - 120
2-Fluorophenol (Surr)	53		17 - 120
Nitrobenzene-d5 (Surr)	74		27 - 120
Phenol-d6 (Surr)	35		10 - 120
p-Terphenyl-d14 (Surr)	88		45 - 120

Lab Sample ID: LCSD 570-593529/3-A

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	15.1		ug/L		76	47 - 120	3	20
2-Methylnaphthalene	20.0	14.7		ug/L		73	43 - 120	4	20
Acenaphthene	20.0	18.0		ug/L		90	60 - 132	4	29
Acenaphthylene	20.0	18.5		ug/L		92	54 - 126	5	45
Anthracene	20.0	18.7		ug/L		93	43 - 120	3	40
Benzo[a]anthracene	20.0	18.1		ug/L		91	42 - 133	2	32
Benzo[a]pyrene	20.0	18.2		ug/L		91	32 - 148	2	43
Benzo[b]fluoranthene	20.0	18.3		ug/L		92	42 - 140	2	43
Benzo[g,h,i]perylene	20.0	18.2		ug/L		91	1 - 195	5	61
Benzo[k]fluoranthene	20.0	18.8		ug/L		94	25 - 146	5	38
Chrysene	20.0	18.3		ug/L		92	44 - 140	2	53
Dibenz(a,h)anthracene	20.0	18.2		ug/L		91	1 - 200	2	75
Fluoranthene	20.0	18.1		ug/L		91	43 - 121	1	40
Fluorene	20.0	18.1		ug/L		90	70 - 120	2	23
Indeno[1,2,3-cd]pyrene	20.0	16.7		ug/L		84	1 - 151	4	60
Naphthalene	20.0	14.6		ug/L		73	36 - 120	2	39
Phenanthrene	20.0	18.1		ug/L		90	65 - 120	2	24
Pyrene	20.0	18.9		ug/L		95	70 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	89		28 - 127
2-Fluorobiphenyl (Surr)	89		31 - 120
2-Fluorophenol (Surr)	57		17 - 120
Nitrobenzene-d5 (Surr)	76		27 - 120
Phenol-d6 (Surr)	37		10 - 120
p-Terphenyl-d14 (Surr)	91		45 - 120

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 570-237041-A-2-A MS

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.20		19.9	14.0		ug/L		70	36 - 120
2-Methylnaphthalene	<0.20		19.9	13.5		ug/L		68	32 - 124
Acenaphthene	<0.20		19.9	16.1		ug/L		81	47 - 145
Acenaphthylene	<0.20		19.9	14.3		ug/L		72	33 - 145
Anthracene	<0.20		19.9	14.6		ug/L		74	27 - 133
Benzo[a]anthracene	<0.20		19.9	15.5		ug/L		78	33 - 143
Benzo[a]pyrene	<0.20		19.9	12.5		ug/L		63	17 - 163
Benzo[b]fluoranthene	<0.20		19.9	14.9		ug/L		75	24 - 159
Benzo[g,h,i]perylene	<0.20		19.9	16.0		ug/L		80	1 - 219
Benzo[k]fluoranthene	<0.20		19.9	15.8		ug/L		79	11 - 162
Chrysene	<0.20		19.9	16.1		ug/L		81	17 - 168
Dibenz(a,h)anthracene	<0.20		19.9	15.9		ug/L		80	1 - 227
Fluoranthene	<0.20		19.9	16.9		ug/L		85	26 - 137
Fluorene	<0.20		19.9	16.1		ug/L		81	59 - 121
Indeno[1,2,3-cd]pyrene	<0.20		19.9	14.9		ug/L		75	1 - 171
Naphthalene	<0.20		19.9	13.2		ug/L		66	21 - 133
Phenanthrene	<0.20		19.9	16.3		ug/L		82	54 - 120
Pyrene	<0.20		19.9	16.9		ug/L		85	52 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol (Surr)	77		28 - 127
2-Fluorobiphenyl (Surr)	74		31 - 120
2-Fluorophenol (Surr)	37		17 - 120
Nitrobenzene-d5 (Surr)	61		27 - 120
Phenol-d6 (Surr)	23		10 - 120
p-Terphenyl-d14 (Surr)	72		45 - 120

Lab Sample ID: 570-237041-B-2-A MSD

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.20		20.1	14.3		ug/L		71	36 - 120	2	30
2-Methylnaphthalene	<0.20		20.1	13.8		ug/L		69	32 - 124	2	30
Acenaphthene	<0.20		20.1	16.8		ug/L		84	47 - 145	4	48
Acenaphthylene	<0.20		20.1	14.7		ug/L		73	33 - 145	2	74
Anthracene	<0.20		20.1	15.2		ug/L		76	27 - 133	4	66
Benzo[a]anthracene	<0.20		20.1	16.5		ug/L		82	33 - 143	6	53
Benzo[a]pyrene	<0.20		20.1	13.1		ug/L		65	17 - 163	4	72
Benzo[b]fluoranthene	<0.20		20.1	16.0		ug/L		80	24 - 159	7	71
Benzo[g,h,i]perylene	<0.20		20.1	17.4		ug/L		87	1 - 219	9	97
Benzo[k]fluoranthene	<0.20		20.1	16.7		ug/L		83	11 - 162	5	63
Chrysene	<0.20		20.1	17.5		ug/L		87	17 - 168	8	87
Dibenz(a,h)anthracene	<0.20		20.1	17.4		ug/L		87	1 - 227	9	126
Fluoranthene	<0.20		20.1	17.6		ug/L		88	26 - 137	4	66
Fluorene	<0.20		20.1	17.2		ug/L		86	59 - 121	7	38
Indeno[1,2,3-cd]pyrene	<0.20		20.1	16.1		ug/L		80	1 - 171	8	99
Naphthalene	<0.20		20.1	13.5		ug/L		67	21 - 133	3	65

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: 570-237041-B-2-A MSD

Matrix: Water

Analysis Batch: 598195

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 593529

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.20		20.1	17.3		ug/L		86	54 - 120	6	39
Pyrene	<0.20		20.1	17.6		ug/L		87	52 - 120	4	49

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	81		28 - 127
2-Fluorobiphenyl (Surr)	79		31 - 120
2-Fluorophenol (Surr)	42		17 - 120
Nitrobenzene-d5 (Surr)	65		27 - 120
Phenol-d6 (Surr)	25		10 - 120
p-Terphenyl-d14 (Surr)	75		45 - 120

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

Lab Sample ID: MB 570-596498/6

Matrix: Water

Analysis Batch: 596498

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			07/13/25 13:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66		38 - 134		07/13/25 13:29	1

Lab Sample ID: LCS 570-596498/4

Matrix: Water

Analysis Batch: 596498

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	420		ug/L		105	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	78		38 - 134

Lab Sample ID: LCSD 570-596498/5

Matrix: Water

Analysis Batch: 596498

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	417		ug/L		104	78 - 120	1	10

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

Eurofins Eaton Analytical Pomona

QC Sample Results

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

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

Lab Sample ID: MRL 570-596498/3

Matrix: Water

Analysis Batch: 596498

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	14.4		ug/L		144	50 - 150		
Surrogate	MRL %Recovery	MRL Qualifier	Limits								
4-Bromofluorobenzene (Surr)	66		38 - 134								

Lab Sample ID: 380-158440-C-1 MS

Matrix: Water

Analysis Batch: 596498

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	413		ug/L		103	68 - 122		
Surrogate	MS %Recovery	MS Qualifier	Limits								
4-Bromofluorobenzene (Surr)	86		38 - 134								

Lab Sample ID: 380-158440-C-1 MSD

Matrix: Water

Analysis Batch: 596498

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	402		ug/L		101	68 - 122	3	18
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	85		38 - 134								

QC Association Summary

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC/MS Semi VOA

Prep Batch: 161526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
MB 380-161526/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-161526/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-161526/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-161526/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-158427-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-158427-S-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

Analysis Batch: 161686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	161526
MB 380-161526/21-A	Method Blank	Total/NA	Water	525.2	161526
LCS 380-161526/23-A	Lab Control Sample	Total/NA	Water	525.2	161526
LCSD 380-161526/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	161526
MRL 380-161526/22-A	Lab Control Sample	Total/NA	Water	525.2	161526
380-158427-R-1-A MS	Matrix Spike	Total/NA	Water	525.2	161526
380-158427-S-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	161526

Prep Batch: 593529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-593529/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-593529/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
570-237041-A-2-A MS	Matrix Spike	Total/NA	Water	625.1	
570-237041-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

Analysis Batch: 598195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1 SIM	593529
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1 SIM	593529
LCS 570-593529/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	593529
LCSD 570-593529/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	593529
570-237041-A-2-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	593529
570-237041-B-2-A MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	593529

Analysis Batch: 598423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	593529
MB 570-593529/1-A	Method Blank	Total/NA	Water	625.1	593529

GC VOA

Analysis Batch: 596498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158447-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
380-158447-2	TB: HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
MB 570-596498/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-596498/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-596498/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-596498/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	

Eurofins Eaton Analytical Pomona

QC Association Summary

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

GC VOA (Continued)

Analysis Batch: 596498 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-158440-C-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-158440-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

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Lab Chronicle

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

Job ID: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-1

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			161526	IQ42	EA POM	07/08/25 13:40
Total/NA	Analysis	525.2		1	161686	Q8LA	EA POM	07/09/25 17:54
Total/NA	Prep	625.1			593529	H1SH	EET CAL 4	07/07/25 05:12
Total/NA	Analysis	625.1		1	598423	J7WE	EET CAL 4	07/17/25 14:46
Total/NA	Prep	625.1			593529	H1SH	EET CAL 4	07/07/25 05:12
Total/NA	Analysis	625.1 SIM		1	598195	AX7Z	EET CAL 4	07/17/25 03:29
Total/NA	Analysis	8015B GRO LL		1	596498	W4LC	EET CAL 4	07/13/25 15:53

Client Sample ID: TB: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-158447-2

Date Collected: 07/01/25 09:25

Matrix: Water

Date Received: 07/03/25 09:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	596498	W4LC	EET CAL 4	07/13/25 22:57

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: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Laboratory: Eurofins Eaton Analytical Pomona

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Hawaii	State	CA00006	01-31-26
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
525.2	525.2	Water	1-Methylnaphthalene
525.2	525.2	Water	2,4'-DDD
525.2	525.2	Water	2,4'-DDE
525.2	525.2	Water	2,4'-DDT
525.2	525.2	Water	2,4-Dinitrotoluene
525.2	525.2	Water	2,6-Dinitrotoluene
525.2	525.2	Water	2-Methylnaphthalene
525.2	525.2	Water	4,4'-DDD
525.2	525.2	Water	4,4'-DDE
525.2	525.2	Water	4,4'-DDT
525.2	525.2	Water	Acetochlor
525.2	525.2	Water	alpha-BHC
525.2	525.2	Water	alpha-Chlordane
525.2	525.2	Water	beta-BHC
525.2	525.2	Water	Chlorobenzilate
525.2	525.2	Water	Chloroneb
525.2	525.2	Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Water	Chlorpyrifos
525.2	525.2	Water	delta-BHC
525.2	525.2	Water	Diclorvos (DDVP)
525.2	525.2	Water	Endosulfan I (Alpha)
525.2	525.2	Water	Endosulfan II (Beta)
525.2	525.2	Water	Endosulfan sulfate
525.2	525.2	Water	Endrin aldehyde
525.2	525.2	Water	EPTC
525.2	525.2	Water	gamma-Chlordane
525.2	525.2	Water	Isophorone
525.2	525.2	Water	Malathion
525.2	525.2	Water	Parathion
525.2	525.2	Water	Pendimethalin (Penoxaline)
525.2	525.2	Water	Terbacil
525.2	525.2	Water	Terbutylazine
525.2	525.2	Water	Total Permethrin (mixed isomers)
525.2	525.2	Water	trans-Nonachlor

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	03-02-26
Arizona	State	AZ0830	11-16-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26

Eurofins Eaton Analytical Pomona

Accreditation/Certification Summary

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

Job ID: 380-158447-1
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	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-25

Method Summary

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

Job ID: 380-158447-1
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
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: 380-158447-1
SDG: Weekly: Halawa Shaft Viewing Pool

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-158447-1	HALAWA SHAFT VIEWING POOL	Water	07/01/25 09:25	07/03/25 09:42
380-158447-2	TB: HALAWA SHAFT VIEWING POOL	Water	07/01/25 09:25	07/03/25 09:42

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Client Information Company: Mr Kirk Iwamoto Address: 630 South Beretania Street Chemistry Lab City: Honolulu State: HI, Zip: 96843 Phone: 808-748-5840 (Tel) Email: kiwamoto@hbws.org Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill Site: Hawaii		Lab PM: Arada, Rachelle E-Mail: Rachelle.Arada@et.eurofinsus.com PWSID:		Carrier Tracking No(s): 380-28005-2757 1 State of Origin:		COC No: 380-28005-2757 1 Page: Page 1 of 1 Job #:	
Analysis Requested Due Date Requested: TAT Requested (days): Compliance Project: ☐ Yes ☒ No PO #: C20525101 exp 05312023 WO #: Project #: 38001111 SSOW#:		Preservation Codes: R - NaThioSO4 RA - NaThioHCl Q - Na2SO3 QA - Na2SO3HCl Y - Trizma I - NH4 Acetate					
Sample Identification Sample Date: 1-Jul-2025 Sample Time: 0925 Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, O=other): Water Preservation Code: G		Field Filtered Sample (Yes or No) ☒ Perform MS/MSD (Yes or No) ☒ 025.1, 025.4 SIM 0015B, GRO, LL, (MOD) GRO 0015B, PRO, LL, CS - HNL Ranges, C10-C24/C24-C38/C8-C18 025.2, PREC - (MOD) 025plus Plus TICs 037.1, DW, PREC - 037.1 Full List 033 - All Analytes		Total Number of Containers: ☒			
Halawa Shaft Viewing Pool		TB: Halawa Shaft Viewing Pool		Special Instructions/Note:			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months		Special Instructions/QC Requirements.			
Empty Kit Relinquished by		Date: 7/2/25 1100 Date/Time: 7/2/25 1100 Company: HBWS		Method of Shipment: ☒ Express 8824 8730 4769 Date/Time: 07/03/25 09:42 Company: EGAC			
Relinquished by		Date/Time:		Date/Time:			
Relinquished by		Date/Time:		Date/Time:			
Custody Seals Intact: A Yes ☒ No ☐		Relinquished by		Cooler Temperature(s) °C and Other Remarks: (F71N) 2.9:00:29. (F71N)			

**941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100**

Chain of Custody Record

 eurofins

Envi

Loc: 380

158447

[illegible]

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-158447-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 158447

List Number: 1

Creator: Hernandez, Orlando

List Source: Eurofins Eaton Analytical Pomona

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

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-158447-1

SDG Number: Weekly: Halawa Shaft Viewing Pool

Login Number: 158447

List Number: 2

Creator: Mills, Mary

List Source: Eurofins Calscience

List Creation: 07/03/25 08:26 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.	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	3.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	