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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 1/31/2025 4:23:36 PM

JOB DESCRIPTION

RED-HILL
Weekly

JOB NUMBER

380-131009-1

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona CA 91768-2642

See page two for job notes and contact information.

Eurofins Eaton Analytical Pomona

Job Notes

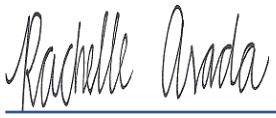
This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Compliance Statement

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

Authorization



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Authorized for release by
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Table of Contents

Definitions/Glossary

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

Job ID: 380-131009-1
SDG: Weekly

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.

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

Job Narrative
380-131009-1

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 1/17/2025 10:28 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.0°C and 3.1°C.

GC/MS Semi VOA
Method 625.1: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-524601. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 625.1 S.I.M

Method 625.1_SIM: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 570-524601. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch. 625.1 S.I.M

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

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

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

Detection Summary

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL — Lab Sample ID: 380-131009-1

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 380-131009-2

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL
Date Collected: 01/14/25 10:00
Date Received: 01/17/25 10:28

Lab Sample ID: 380-131009-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2,4'-DDD	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2,4'-DDE	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2,4'-DDT	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2,4-Dinitrotoluene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2,6-Dinitrotoluene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
2-Methylnaphthalene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
4,4'-DDD	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
4,4'-DDE	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
4,4'-DDT	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Acenaphthene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Acenaphthylene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Acetochlor	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Alachlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
alpha-BHC	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
alpha-Chlordane	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Anthracene	<0.019		0.019		ug/L		01/21/25 06:08	01/21/25 17:48	1
Atrazine	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Benz(a)anthracene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Benzo[a]pyrene	<0.019		0.019		ug/L		01/21/25 06:08	01/21/25 17:48	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		01/21/25 06:08	01/21/25 17:48	1
Benzo[g,h,i]perylene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		01/21/25 06:08	01/21/25 17:48	1
beta-BHC	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		01/21/25 06:08	01/21/25 17:48	1
Bromacil	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Butachlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Butylbenzylphthalate	<0.48		0.48		ug/L		01/21/25 06:08	01/21/25 17:48	1
Chlorobenzilate	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Chloroneb	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Chlorpyrifos	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Chrysene	<0.019		0.019		ug/L		01/21/25 06:08	01/21/25 17:48	1
delta-BHC	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		01/21/25 06:08	01/21/25 17:48	1
Dibenz(a,h)anthracene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Diclorvos (DDVP)	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Dieldrin	<0.0096		0.0096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Diethylphthalate	<0.48		0.48		ug/L		01/21/25 06:08	01/21/25 17:48	1
Dimethylphthalate	<0.48		0.48		ug/L		01/21/25 06:08	01/21/25 17:48	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		01/21/25 06:08	01/21/25 17:48	1
Di-n-octyl phthalate	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Endosulfan I (Alpha)	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Endosulfan II (Beta)	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Endosulfan sulfate	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Endrin	<0.0096		0.0096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Endrin aldehyde	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
EPTC	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Fluoranthene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL
Date Collected: 01/14/25 10:00
Date Received: 01/17/25 10:28

Lab Sample ID: 380-131009-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
gamma-Chlordane	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Heptachlor	<0.0096		0.0096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Heptachlor epoxide (isomer B)	<0.0096		0.0096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Hexachlorobenzene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Hexachlorocyclopentadiene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Isophorone	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Lindane	<0.0096		0.0096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Malathion	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Methoxychlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Metolachlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Molinate	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Naphthalene	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Parathion	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Pendimethalin (Penoxaline)	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Phenanthrene	<0.039		0.039		ug/L		01/21/25 06:08	01/21/25 17:48	1
Propachlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Pyrene	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Simazine	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Terbacil	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Terbuthylazine	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Thiobencarb	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		01/21/25 06:08	01/21/25 17:48	1
trans-Nonachlor	<0.048		0.048		ug/L		01/21/25 06:08	01/21/25 17:48	1
Trifluralin	<0.096		0.096		ug/L		01/21/25 06:08	01/21/25 17:48	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*01/21/25 06:08*	*01/21/25 17:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*99*		*70 - 130*	*01/21/25 06:08*	*01/21/25 17:48*	*1*
Perylene-d12	*95*		*70 - 130*	*01/21/25 06:08*	*01/21/25 17:48*	*1*
Triphenylphosphate	*102*		*70 - 130*	*01/21/25 06:08*	*01/21/25 17:48*	*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		01/20/25 13:18	01/29/25 19:01	1
2-Methylnaphthalene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Acenaphthene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Acenaphthylene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Anthracene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Benzo[a]anthracene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Benzo[a]pyrene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Benzo[b]fluoranthene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Benzo[k]fluoranthene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Chrysene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Fluoranthene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-131009-1
Date Collected: 01/14/25 10:00
Matrix: Water
Date Received: 01/17/25 10:28

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		01/20/25 13:18	01/29/25 19:01	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Naphthalene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Phenanthrene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1
Pyrene	<0.19		0.19		ug/L		01/20/25 13:18	01/29/25 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*28 - 127*	*01/20/25 13:18*	*01/29/25 19:01*	*1*
2-Fluorobiphenyl (Surr)	*60*		*31 - 120*	*01/20/25 13:18*	*01/29/25 19:01*	*1*
2-Fluorophenol (Surr)	*40*		*17 - 120*	*01/20/25 13:18*	*01/29/25 19:01*	*1*
Nitrobenzene-d5 (Surr)	*63*		*27 - 120*	*01/20/25 13:18*	*01/29/25 19:01*	*1*
Phenol-d6 (Surr)	*26*		*10 - 120*	*01/20/25 13:18*	*01/29/25 19:01*	*1*
p-Terphenyl-d14 (Surr)	*70*		*45 - 120*	*01/20/25 13:18*	*01/29/25 19:01*	*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-	*6.0*	*T J N*	*ug/L*		*2.76*	*107-86-8*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
Cyclohexane, (1,1-dimethylpropyl)-	*5.2*	*T J N*	*ug/L*		*2.85*	*31797-64-5*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
2-Pentene, 2,4,4-trimethyl-	*6.3*	*T J N*	*ug/L*		*2.98*	*107-40-4*	*01/20/25 13:18*	*01/27/25 16:02*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*33 - 139*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
2-Fluorobiphenyl (Surr)	*59*		*33 - 126*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
2-Fluorophenol (Surr)	*46*		*12 - 120*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
Nitrobenzene-d5 (Surr)	*65*		*36 - 120*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
Phenol-d6 (Surr)	*28*		*10 - 120*	*01/20/25 13:18*	*01/27/25 16:02*	*1*
p-Terphenyl-d14 (Surr)	*66*		*47 - 131*	*01/20/25 13:18*	*01/27/25 16:02*	*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			01/22/25 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*38 - 134*		*01/22/25 17:59*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		01/20/25 15:09	01/28/25 03:20	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		01/20/25 15:09	01/28/25 03:20	1
C8-C18	<25		25		ug/L		01/20/25 15:09	01/28/25 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*68*		*60 - 130*	*01/20/25 15:09*	*01/28/25 03:20*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-131009-2
Date Collected: 01/14/25 10:00
Matrix: Water
Date Received: 01/17/25 10:28

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			01/22/25 22:14	1

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: TRIP BLANK
Date Collected: 01/14/25 10:00
Date Received: 01/17/25 10:28

Lab Sample ID: 380-131009-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		38 - 134		01/22/25 22:14	1

Action Limit Summary

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL — Lab Sample ID: 380-131009-1

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 Limit	RL	Method	Prep Type
Alachlor	<0.048		ug/L	2	0.048	525.2	Total/NA
Atrazine	<0.048		ug/L	3	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.019		ug/L	0.2	0.019	525.2	Total/NA
Bis(2-ethylhexyl) phthalate	<0.58		ug/L	6	0.58	525.2	Total/NA
Di(2-ethylhexyl)adipate	<0.58		ug/L	400	0.58	525.2	Total/NA
Endrin	<0.0096		ug/L	2	0.0096	525.2	Total/NA
Heptachlor	<0.0096		ug/L	0.4	0.0096	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Hexachlorobenzene	<0.048		ug/L	1	0.048	525.2	Total/NA
Hexachlorocyclopentadiene	<0.048		ug/L	50	0.048	525.2	Total/NA
Lindane	<0.0096		ug/L	0.2	0.0096	525.2	Total/NA
Methoxychlor	<0.048		ug/L	40	0.048	525.2	Total/NA
Simazine	<0.048		ug/L	4	0.048	525.2	Total/NA
Benzo[a]pyrene	<0.19		ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-131009-1
SDG: Weekly

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		2NMX	PRY	TPP							
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)							
380-131009-1	HALAWA SHAFT VIEWING PO(	99	95	102							
380-131022-AC-1-A MS	Matrix Spike	99	96	109							
380-131022-AD-1-A MSD	Matrix Spike Duplicate	98	97	110							
LCS 380-129273/23-A	Lab Control Sample	99	92	110							
MB 380-129273/21-A	Method Blank	98	88	103							
MRL 380-129273/22-A	Lab Control Sample	99	85	102							

Surrogate Legend

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

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL6	TPHd14		
Lab Sample ID	Client Sample ID	(33-139)	(33-126)	(12-120)	(36-120)	(10-120)	(47-131)		
380-131009-1	HALAWA SHAFT VIEWING PO(	82	59	46	65	28	66		
MB 570-524601/1-A	Method Blank	86	54	51	63	31	65		

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**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL6	TPHd14		
Lab Sample ID	Client Sample ID	(28-127)	(31-120)	(17-120)	(27-120)	(10-120)	(45-120)		
380-131009-1	HALAWA SHAFT VIEWING PO(	75	60	40	63	26	70		
LCS 570-524601/2-A	Lab Control Sample	84	69	54	64	37	79		
LCSD 570-524601/3-A	Lab Control Sample Dup	83	76	59	66	39	82		
MB 570-524601/1-A	Method Blank	91	57	44	62	28	68		

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: 380-131009-1
SDG: Weekly

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

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (38-134)
380-130371-C-3 MS	Matrix Spike	101
380-130371-C-3 MSD	Matrix Spike Duplicate	100
380-131009-1	HALAWA SHAFT VIEWING POOL	95
380-131009-2	TRIP BLANK	97
LCS 570-525353/4	Lab Control Sample	101
LCSD 570 525353/5	Lab Control Sample Dup	104
MB 570-525353/6	Method Blank	104
MRL 570-525353/3	Lab Control Sample	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water **Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) OTCSN1 (60-130)
380-130371-B-3-A MS	Matrix Spike	112
380-130371-B-3-B MSD	Matrix Spike Duplicate	89
380-131009-1	HALAWA SHAFT VIEWING POOL	68
LCS 570-524661/2-A	Lab Control Sample	86
LCSD 570-524661/3-A	Lab Control Sample Dup	88
MB 570-524661/1-A	Method Blank	85
MRL 570-524661/4-A	Lab Control Sample	90

Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

Lab Sample ID: MB 380-129273/21-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 129273

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4'-DDD	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4'-DDE	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4'-DDT	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2,4-Dinitrotoluene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2,6-Dinitrotoluene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
2-Methylnaphthalene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDD	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDE	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
4,4'-DDT	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Acenaphthene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Acenaphthylene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Acetochlor	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Alachlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
alpha-BHC	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
alpha-Chlordane	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Anthracene	<0.020		0.020		ug/L		01/21/25 06:08	01/21/25 16:26	1
Atrazine	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Benz(a)anthracene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[a]pyrene	<0.020		0.020		ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[g,h,i]perylene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		01/21/25 06:08	01/21/25 16:26	1
beta-BHC	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Bis(2-ethylhexyl) phthalate	<0.60		0.60		ug/L		01/21/25 06:08	01/21/25 16:26	1
Bromacil	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Butachlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Butylbenzylphthalate	<0.50		0.50		ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorobenzilate	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Chloroneb	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorothalonil (Draconil, Bravo)	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Chlorpyrifos	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Chrysene	<0.020		0.020		ug/L		01/21/25 06:08	01/21/25 16:26	1
delta-BHC	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Di(2-ethylhexyl)adipate	<0.60		0.60		ug/L		01/21/25 06:08	01/21/25 16:26	1
Dibenz(a,h)anthracene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Diclorvos (DDVP)	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Dieldrin	<0.0099		0.0099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Diethylphthalate	<0.50		0.50		ug/L		01/21/25 06:08	01/21/25 16:26	1
Dimethylphthalate	<0.50		0.50		ug/L		01/21/25 06:08	01/21/25 16:26	1
Di-n-butyl phthalate	<0.99		0.99		ug/L		01/21/25 06:08	01/21/25 16:26	1
Di-n-octyl phthalate	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan I (Alpha)	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan II (Beta)	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Endosulfan sulfate	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Endrin	<0.0099		0.0099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Endrin aldehyde	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
EPTC	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1

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

Lab Sample ID: MB 380-129273/21-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 129273

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Fluorene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
gamma-Chlordane	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Heptachlor	<0.0099		0.0099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Heptachlor epoxide (isomer B)	<0.0099		0.0099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Hexachlorobenzene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Hexachlorocyclopentadiene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Isophorone	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Lindane	<0.0099		0.0099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Malathion	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Methoxychlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Metolachlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Molinate	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Naphthalene	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Parathion	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Pendimethalin (Penoxaline)	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Phenanthrene	<0.040		0.040		ug/L		01/21/25 06:08	01/21/25 16:26	1
Propachlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Pyrene	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Simazine	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Terbacil	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Terbuthylazine	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Thiobencarb	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		01/21/25 06:08	01/21/25 16:26	1
trans-Nonachlor	<0.050		0.050		ug/L		01/21/25 06:08	01/21/25 16:26	1
Trifluralin	<0.099		0.099		ug/L		01/21/25 06:08	01/21/25 16:26	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*0.511*	*T J*	*ug/L*		*11.21*	*N/A*	*01/21/25 06:08*	*01/21/25 16:26*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*98*		*70 - 130*	*01/21/25 06:08*	*01/21/25 16:26*	*1*
Perylene-d12	*88*		*70 - 130*	*01/21/25 06:08*	*01/21/25 16:26*	*1*
Triphenylphosphate	*103*		*70 - 130*	*01/21/25 06:08*	*01/21/25 16:26*	*1*

Lab Sample ID: LCS 380-129273/23-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1-Methylnaphthalene			1.99	1.81		ug/L		91	70 - 130		
2,4'-DDD			1.99	2.11		ug/L		106	70 - 130		
2,4'-DDE			1.99	2.02		ug/L		102	70 - 130		
2,4'-DDT			1.99	2.02		ug/L		102	70 - 130		
2,4-Dinitrotoluene			1.99	2.09		ug/L		105	70 - 130		
2,6-Dinitrotoluene			1.99	1.97		ug/L		99	70 - 130		
2-Methylnaphthalene			1.99	1.80		ug/L		90	70 - 130		

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

Lab Sample ID: LCS 380-129273/23-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	1.99	2.12		ug/L		107	70 - 130
4,4'-DDE	1.99	1.98		ug/L		100	70 - 130
4,4'-DDT	1.99	2.07		ug/L		104	70 - 130
Acenaphthene	1.99	1.86		ug/L		94	70 - 130
Acenaphthylene	1.99	1.83		ug/L		92	70 - 130
Acetochlor	1.99	2.07		ug/L		104	70 - 130
Alachlor	1.99	1.99		ug/L		100	70 - 130
alpha-BHC	1.99	1.96		ug/L		99	70 - 130
alpha-Chlordane	1.99	2.06		ug/L		104	70 - 130
Anthracene	1.99	1.73		ug/L		87	70 - 130
Atrazine	1.99	2.05		ug/L		103	70 - 130
Benz(a)anthracene	1.99	1.97		ug/L		99	70 - 130
Benzo[a]pyrene	1.99	1.79		ug/L		90	70 - 130
Benzo[b]fluoranthene	1.99	1.88		ug/L		95	70 - 130
Benzo[g,h,i]perylene	1.99	1.88		ug/L		95	70 - 130
Benzo[k]fluoranthene	1.99	1.94		ug/L		98	70 - 130
beta-BHC	1.99	2.14		ug/L		108	70 - 130
Bis(2-ethylhexyl) phthalate	1.99	1.89		ug/L		95	70 - 130
Bromacil	1.99	2.10		ug/L		106	70 - 130
Butachlor	1.99	2.10		ug/L		106	70 - 130
Butylbenzylphthalate	1.99	2.11		ug/L		106	70 - 130
Chlorobenzilate	1.99	1.87		ug/L		94	70 - 130
Chloroneb	1.99	2.07		ug/L		104	70 - 130
Chlorothalonil (Draconil, Bravo)	1.99	2.03		ug/L		102	70 - 130
Chlorpyrifos	1.99	2.04		ug/L		103	70 - 130
Chrysene	1.99	1.94		ug/L		97	70 - 130
delta-BHC	1.99	2.00		ug/L		101	70 - 130
Di(2-ethylhexyl)adipate	1.99	2.01		ug/L		101	70 - 130
Dibenz(a,h)anthracene	1.99	1.88		ug/L		95	70 - 130
Diclorvos (DDVP)	1.99	1.80		ug/L		91	70 - 130
Dieldrin	1.99	1.90		ug/L		95	70 - 130
Diethylphthalate	1.99	2.03		ug/L		102	70 - 130
Dimethylphthalate	1.99	1.96		ug/L		99	70 - 130
Di-n-butyl phthalate	3.97	4.07		ug/L		103	70 - 130
Di-n-octyl phthalate	1.99	1.71		ug/L		86	70 - 130
Endosulfan I (Alpha)	1.99	1.95		ug/L		98	70 - 130
Endosulfan II (Beta)	1.99	2.11		ug/L		106	70 - 130
Endosulfan sulfate	1.99	2.01		ug/L		101	70 - 130
Endrin	1.99	2.32		ug/L		117	70 - 130
Endrin aldehyde	1.99	1.92		ug/L		97	60 - 130
EPTC	1.99	1.84		ug/L		93	70 - 130
Fluoranthene	1.99	2.06		ug/L		104	70 - 130
Fluorene	1.99	1.95		ug/L		98	70 - 130
gamma-Chlordane	1.99	2.00		ug/L		101	70 - 130
Heptachlor	1.99	2.00		ug/L		101	70 - 130
Heptachlor epoxide (isomer B)	1.99	2.01		ug/L		101	70 - 130
Hexachlorobenzene	1.99	1.89		ug/L		95	70 - 130
Hexachlorocyclopentadiene	1.99	1.97		ug/L		99	70 - 130
Indeno[1,2,3-cd]pyrene	1.99	1.76		ug/L		89	70 - 130

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

Lab Sample ID: LCS 380-129273/23-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Isophorone	1.99	1.61		ug/L		81	70 - 130
Lindane	1.99	2.04		ug/L		103	70 - 130
Malathion	1.99	2.07		ug/L		104	70 - 130
Methoxychlor	1.99	1.94		ug/L		98	70 - 130
Metolachlor	1.99	2.02		ug/L		102	70 - 130
Molinate	1.99	1.95		ug/L		98	70 - 130
Naphthalene	1.99	1.81		ug/L		91	70 - 130
Parathion	1.99	2.13		ug/L		107	70 - 130
Pendimethalin (Penoxaline)	1.99	2.09		ug/L		105	70 - 130
Phenanthrene	1.99	1.80		ug/L		91	70 - 130
Propachlor	1.99	2.08		ug/L		105	70 - 130
Pyrene	1.99	2.04		ug/L		103	70 - 130
Simazine	1.99	1.98		ug/L		100	70 - 130
Terbacil	1.99	2.09		ug/L		105	70 - 130
Terbuthylazine	1.99	2.30		ug/L		116	70 - 130
Thiobencarb	1.99	2.08		ug/L		105	70 - 130
trans-Nonachlor	1.99	1.95		ug/L		98	70 - 130
Trifluralin	1.99	1.87		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*99*		*70 - 130*
Perylene-d12	*92*		*70 - 130*
Triphenylphosphate	*110*		*70 - 130*

Lab Sample ID: MRL 380-129273/22-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0993	0.106		ug/L		107	50 - 150
2,4'-DDD	0.0993	0.0932	J	ug/L		94	50 - 150
2,4'-DDE	0.0993	0.0993		ug/L		100	50 - 150
2,4'-DDT	0.0993	0.112		ug/L		113	50 - 150
2,4-Dinitrotoluene	0.0993	0.119		ug/L		120	50 - 150
2,6-Dinitrotoluene	0.0993	0.131		ug/L		132	50 - 150
2-Methylnaphthalene	0.0993	0.101		ug/L		102	50 - 150
4,4'-DDD	0.0993	0.107		ug/L		107	50 - 150
4,4'-DDE	0.0993	0.0948	J	ug/L		96	50 - 150
4,4'-DDT	0.0993	0.114		ug/L		115	50 - 150
Acenaphthene	0.0993	0.0921	J	ug/L		93	50 - 150
Acenaphthylene	0.0993	0.0888	J	ug/L		89	50 - 150
Acetochlor	0.0993	0.120		ug/L		120	50 - 150
Alachlor	0.0496	0.0657		ug/L		132	50 - 150
alpha-BHC	0.0993	0.106		ug/L		107	50 - 150
alpha-Chlordane	0.0248	<0.029		ug/L		91	50 - 150
Anthracene	0.0199	0.0201		ug/L		101	50 - 150
Atrazine	0.0496	0.0646		ug/L		130	50 - 150
Benz(a)anthracene	0.0496	0.0521		ug/L		105	50 - 150

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

Lab Sample ID: MRL 380-129273/22-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	0.0199	0.0154	J	ug/L		77	50 - 150
Benzo[b]fluoranthene	0.0199	0.0170	J	ug/L		86	50 - 150
Benzo[g,h,i]perylene	0.0496	0.0415	J	ug/L		84	50 - 150
Benzo[k]fluoranthene	0.0199	0.0179	J	ug/L		90	50 - 150
beta-BHC	0.0993	0.120		ug/L		121	50 - 150
Bis(2-ethylhexyl) phthalate	0.596	0.488	J	ug/L		82	50 - 150
Bromacil	0.0993	0.107		ug/L		108	50 - 150
Butachlor	0.0496	0.0687		ug/L		138	50 - 150
Butylbenzylphthalate	0.496	0.530		ug/L		107	50 - 150
Chlorobenzilate	0.0993	0.105		ug/L		106	50 - 150
Chloroneb	0.0993	0.0791	J	ug/L		80	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0993	0.0921	J	ug/L		93	50 - 150
Chlorpyrifos	0.0496	0.0482	J	ug/L		97	50 - 150
Chrysene	0.0199	0.0208		ug/L		105	50 - 150
delta-BHC	0.0993	0.108		ug/L		109	50 - 150
Di(2-ethylhexyl)adipate	0.596	0.559	J	ug/L		94	50 - 150
Dibenz(a,h)anthracene	0.0496	0.0402	J	ug/L		81	50 - 150
Diclorvos (DDVP)	0.0496	0.0554		ug/L		112	50 - 150
Dieldrin	0.00993	0.0124		ug/L		124	50 - 150
Diethylphthalate	0.496	0.525		ug/L		106	50 - 150
Dimethylphthalate	0.496	0.521		ug/L		105	50 - 150
Di-n-butyl phthalate	0.496	0.513	J	ug/L		103	49 - 243
Di-n-octyl phthalate	0.0993	0.0787	J	ug/L		79	50 - 150
Endosulfan I (Alpha)	0.0993	0.0858	J	ug/L		86	50 - 150
Endosulfan II (Beta)	0.0993	0.121		ug/L		122	50 - 150
Endosulfan sulfate	0.0993	0.102		ug/L		103	50 - 150
Endrin	0.00993	0.0135		ug/L		136	50 - 150
Endrin aldehyde	0.0993	0.0975	J	ug/L		98	50 - 150
EPTC	0.0993	0.0907	J	ug/L		91	50 - 150
Fluoranthene	0.0993	0.0991		ug/L		100	50 - 150
Fluorene	0.0496	0.0507		ug/L		102	50 - 150
gamma-Chlordane	0.0248	0.0229	J	ug/L		92	50 - 150
Heptachlor	0.00993	0.00897	J	ug/L		90	50 - 150
Heptachlor epoxide (isomer B)	0.00993	0.0109		ug/L		110	50 - 150
Hexachlorobenzene	0.0496	0.0471	J	ug/L		95	50 - 150
Hexachlorocyclopentadiene	0.0496	0.0463	J	ug/L		93	50 - 150
Indeno[1,2,3-cd]pyrene	0.0496	0.0408	J	ug/L		82	50 - 150
Isophorone	0.0993	0.102		ug/L		103	50 - 150
Lindane	0.00993	0.00979	J	ug/L		99	50 - 150
Malathion	0.0993	0.116		ug/L		117	50 - 150
Methoxychlor	0.0496	0.0666		ug/L		134	50 - 150
Metolachlor	0.0496	0.0676		ug/L		136	50 - 150
Molinate	0.0993	0.102		ug/L		103	50 - 150
Naphthalene	0.0993	0.0967	J	ug/L		97	50 - 150
Parathion	0.0993	0.0997		ug/L		100	50 - 150
Pendimethalin (Penoxaline)	0.0993	0.104		ug/L		105	50 - 150
Phenanthrene	0.0397	0.0420		ug/L		106	50 - 150
Propachlor	0.0496	0.0532		ug/L		107	50 - 150
Pyrene	0.0496	0.0480	J	ug/L		97	50 - 150

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

Lab Sample ID: MRL 380-129273/22-A
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Simazine	0.0496	0.0518		ug/L		104	50 - 150
Terbacil	0.0993	0.111		ug/L		112	50 - 150
Terbuthylazine	0.0993	0.105		ug/L		106	50 - 150
Thiobencarb	0.0993	0.0996		ug/L		100	50 - 150
trans-Nonachlor	0.0248	<0.026		ug/L		96	50 - 150
Trifluralin	0.0993	0.105		ug/L		106	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*99*		*70 - 130*
Perylene-d12	*85*		*70 - 130*
Triphenylphosphate	*102*		*70 - 130*

Lab Sample ID: 380-131022-AC-1-A MS
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.099		1.94	1.84		ug/L		95	70 - 130
2,4'-DDD	<0.099		1.94	2.16		ug/L		111	70 - 130
2,4'-DDE	<0.099		1.94	2.05		ug/L		106	70 - 130
2,4'-DDT	<0.099		1.94	2.09		ug/L		108	70 - 130
2,4-Dinitrotoluene	<0.099		1.94	2.31		ug/L		119	70 - 130
2,6-Dinitrotoluene	<0.099		1.94	2.16		ug/L		111	70 - 130
2-Methylnaphthalene	<0.099		1.94	1.83		ug/L		94	70 - 130
4,4'-DDD	<0.099		1.94	2.17		ug/L		112	70 - 130
4,4'-DDE	<0.099		1.94	2.01		ug/L		104	70 - 130
4,4'-DDT	<0.099		1.94	2.16		ug/L		111	70 - 130
Acenaphthene	<0.099		1.94	1.92		ug/L		99	70 - 130
Acenaphthylene	<0.099		1.94	1.90		ug/L		98	70 - 130
Acetochlor	<0.099		1.94	2.11		ug/L		108	70 - 130
Alachlor	<0.049		1.94	2.06		ug/L		106	70 - 130
alpha-BHC	<0.099		1.94	2.03		ug/L		105	70 - 130
alpha-Chlordane	<0.049		1.94	2.14		ug/L		110	70 - 130
Anthracene	<0.020		1.94	1.43		ug/L		74	70 - 130
Atrazine	<0.049		1.94	2.11		ug/L		109	70 - 130
Benz(a)anthracene	<0.049		1.94	1.96		ug/L		101	70 - 130
Benzo[a]pyrene	<0.020		1.94	1.73		ug/L		89	70 - 130
Benzo[b]fluoranthene	<0.020		1.94	1.97		ug/L		101	70 - 130
Benzo[g,h,i]perylene	<0.049		1.94	1.93		ug/L		100	70 - 130
Benzo[k]fluoranthene	<0.020		1.94	2.02		ug/L		104	70 - 130
beta-BHC	<0.099		1.94	2.17		ug/L		112	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.94	1.79		ug/L		92	70 - 130
Bromacil	<0.099		1.94	2.28		ug/L		118	70 - 130
Butachlor	<0.049		1.94	2.13		ug/L		110	70 - 130
Butylbenzylphthalate	<0.49		1.94	2.12		ug/L		109	70 - 130
Chlorobenzilate	<0.099		1.94	1.90		ug/L		98	70 - 130
Chloroneb	<0.099		1.94	2.10		ug/L		108	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.099		1.94	2.14		ug/L		110	70 - 130

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

Lab Sample ID: 380-131022-AC-1-A MS
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorpyrifos	<0.049		1.94	2.12		ug/L		109	70 - 130
Chrysene	<0.020		1.94	1.98		ug/L		102	70 - 130
delta-BHC	<0.099		1.94	2.04		ug/L		105	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.94	1.95		ug/L		101	70 - 130
Dibenz(a,h)anthracene	<0.049		1.94	1.91		ug/L		99	70 - 130
Diclorvos (DDVP)	<0.049		1.94	1.91		ug/L		99	70 - 130
Dieldrin	<0.0099		1.94	1.96		ug/L		101	70 - 130
Diethylphthalate	<0.49		1.94	2.05		ug/L		106	70 - 130
Dimethylphthalate	<0.49		1.94	1.99		ug/L		103	70 - 130
Di-n-butyl phthalate	<0.99		3.88	4.16		ug/L		107	70 - 130
Di-n-octyl phthalate	<0.099		1.94	1.60		ug/L		82	70 - 130
Endosulfan I (Alpha)	<0.099		1.94	2.01		ug/L		104	70 - 130
Endosulfan II (Beta)	<0.099		1.94	2.13		ug/L		110	70 - 130
Endosulfan sulfate	<0.099		1.94	2.11		ug/L		109	70 - 130
Endrin	<0.0099		1.94	2.38		ug/L		123	70 - 130
Endrin aldehyde	<0.099		1.94	1.71		ug/L		88	60 - 130
EPTC	<0.099		1.94	1.89		ug/L		97	70 - 130
Fluoranthene	<0.099		1.94	2.12		ug/L		109	70 - 130
Fluorene	<0.049		1.94	1.97		ug/L		102	70 - 130
gamma-Chlordane	<0.049		1.94	2.07		ug/L		106	70 - 130
Heptachlor	<0.0099		1.94	2.05		ug/L		106	70 - 130
Heptachlor epoxide (isomer B)	<0.0099		1.94	2.07		ug/L		107	70 - 130
Hexachlorobenzene	<0.049		1.94	1.93		ug/L		99	70 - 130
Hexachlorocyclopentadiene	<0.049		1.94	2.05		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.94	1.94		ug/L		100	70 - 130
Isophorone	<0.099		1.94	1.67		ug/L		86	70 - 130
Lindane	<0.0099		1.94	2.06		ug/L		106	70 - 130
Malathion	<0.099		1.94	2.12		ug/L		109	70 - 130
Methoxychlor	<0.049		1.94	2.06		ug/L		106	70 - 130
Metolachlor	<0.049		1.94	2.09		ug/L		108	70 - 130
Molinate	<0.099		1.94	2.00		ug/L		103	70 - 130
Naphthalene	<0.099		1.94	1.87		ug/L		96	70 - 130
Parathion	<0.099		1.94	2.25		ug/L		116	70 - 130
Pendimethalin (Penoxaline)	<0.099		1.94	2.26		ug/L		117	70 - 130
Phenanthrene	<0.040		1.94	1.83		ug/L		94	70 - 130
Propachlor	<0.049		1.94	2.11		ug/L		109	70 - 130
Pyrene	<0.049		1.94	2.08		ug/L		107	70 - 130
Simazine	<0.049		1.94	2.04		ug/L		105	70 - 130
Terbacil	<0.099		1.94	2.26		ug/L		116	70 - 130
Terbuthylazine	<0.099		1.94	2.30		ug/L		118	70 - 130
Thiobencarb	<0.099		1.94	2.11		ug/L		109	70 - 130
trans-Nonachlor	<0.049		1.94	2.04		ug/L		105	70 - 130
Trifluralin	<0.099		1.94	1.99		ug/L		103	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*99*		*70 - 130*
Perylene-d12	*96*		*70 - 130*
Triphenylphosphate	*109*		*70 - 130*

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

Lab Sample ID: 380-131022-AD-1-A MSD
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.099		1.96	1.86		ug/L		95	70 - 130	1	20
2,4'-DDD	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
2,4'-DDE	<0.099		1.96	2.05		ug/L		105	70 - 130	0	20
2,4'-DDT	<0.099		1.96	2.13		ug/L		108	70 - 130	2	20
2,4-Dinitrotoluene	<0.099		1.96	2.32		ug/L		118	70 - 130	1	20
2,6-Dinitrotoluene	<0.099		1.96	2.15		ug/L		109	70 - 130	0	20
2-Methylnaphthalene	<0.099		1.96	1.85		ug/L		94	70 - 130	1	20
4,4'-DDD	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
4,4'-DDE	<0.099		1.96	2.03		ug/L		104	70 - 130	1	20
4,4'-DDT	<0.099		1.96	2.19		ug/L		112	70 - 130	1	20
Acenaphthene	<0.099		1.96	1.95		ug/L		99	70 - 130	1	20
Acenaphthylene	<0.099		1.96	1.91		ug/L		97	70 - 130	0	20
Acetochlor	<0.099		1.96	2.14		ug/L		109	70 - 130	2	20
Alachlor	<0.049		1.96	2.07		ug/L		105	70 - 130	1	20
alpha-BHC	<0.099		1.96	2.05		ug/L		104	70 - 130	1	20
alpha-Chlordane	<0.049		1.96	2.14		ug/L		109	70 - 130	0	20
Anthracene	<0.020		1.96	1.45		ug/L		74	70 - 130	1	20
Atrazine	<0.049		1.96	2.16		ug/L		110	70 - 130	2	20
Benz(a)anthracene	<0.049		1.96	2.00		ug/L		102	70 - 130	2	20
Benzo[a]pyrene	<0.020		1.96	1.77		ug/L		90	70 - 130	2	20
Benzo[b]fluoranthene	<0.020		1.96	1.98		ug/L		101	70 - 130	1	20
Benzo[g,h,i]perylene	<0.049		1.96	1.96		ug/L		100	70 - 130	1	20
Benzo[k]fluoranthene	<0.020		1.96	2.06		ug/L		105	70 - 130	2	20
beta-BHC	<0.099		1.96	2.23		ug/L		113	70 - 130	3	20
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.68		ug/L		86	70 - 130	6	20
Bromacil	<0.099		1.96	2.29		ug/L		117	70 - 130	0	20
Butachlor	<0.049		1.96	2.18		ug/L		111	70 - 130	2	20
Butylbenzylphthalate	<0.49		1.96	2.17		ug/L		111	70 - 130	2	20
Chlorobenzilate	<0.099		1.96	1.80		ug/L		92	70 - 130	5	20
Chloroneb	<0.099		1.96	2.17		ug/L		111	70 - 130	3	20
Chlorothalonil (Draconil, Bravo)	<0.099		1.96	2.11		ug/L		108	70 - 130	1	20
Chlorpyrifos	<0.049		1.96	2.12		ug/L		108	70 - 130	0	20
Chrysene	<0.020		1.96	1.99		ug/L		102	70 - 130	1	20
delta-BHC	<0.099		1.96	2.08		ug/L		106	70 - 130	2	20
Di(2-ethylhexyl)adipate	<0.59		1.96	1.86		ug/L		95	70 - 130	5	20
Dibenz(a,h)anthracene	<0.049		1.96	1.92		ug/L		98	70 - 130	0	20
Diclorvos (DDVP)	<0.049		1.96	1.90		ug/L		97	70 - 130	1	20
Dieldrin	<0.0099		1.96	1.97		ug/L		100	70 - 130	1	20
Diethylphthalate	<0.49		1.96	2.08		ug/L		106	70 - 130	1	20
Dimethylphthalate	<0.49		1.96	2.01		ug/L		102	70 - 130	1	20
Di-n-butyl phthalate	<0.99		3.93	4.19		ug/L		107	70 - 130	1	20
Di-n-octyl phthalate	<0.099		1.96	1.47		ug/L		75	70 - 130	8	20
Endosulfan I (Alpha)	<0.099		1.96	2.04		ug/L		104	70 - 130	2	20
Endosulfan II (Beta)	<0.099		1.96	2.09		ug/L		107	70 - 130	2	20
Endosulfan sulfate	<0.099		1.96	2.16		ug/L		110	70 - 130	2	20
Endrin	<0.0099		1.96	2.45		ug/L		125	70 - 130	3	20
Endrin aldehyde	<0.099		1.96	1.76		ug/L		89	60 - 130	2	20
EPTC	<0.099		1.96	1.90		ug/L		97	70 - 130	0	20

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

Lab Sample ID: 380-131022-AD-1-A MSD
Matrix: Water
Analysis Batch: 129391

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 129273

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Fluoranthene	<0.099		1.96	2.13		ug/L		109	70 - 130	1	20
Fluorene	<0.049		1.96	2.01		ug/L		102	70 - 130	2	20
gamma-Chlordane	<0.049		1.96	2.06		ug/L		105	70 - 130	0	20
Heptachlor	<0.0099		1.96	2.03		ug/L		103	70 - 130	1	20
Heptachlor epoxide (isomer B)	<0.0099		1.96	2.09		ug/L		107	70 - 130	1	20
Hexachlorobenzene	<0.049		1.96	1.98		ug/L		101	70 - 130	3	20
Hexachlorocyclopentadiene	<0.049		1.96	2.07		ug/L		105	70 - 130	1	20
Indeno[1,2,3-cd]pyrene	<0.049		1.96	1.96		ug/L		100	70 - 130	1	20
Isophorone	<0.099		1.96	1.76		ug/L		90	70 - 130	5	20
Lindane	<0.0099		1.96	2.13		ug/L		108	70 - 130	3	20
Malathion	<0.099		1.96	2.16		ug/L		110	70 - 130	2	20
Methoxychlor	<0.049		1.96	2.06		ug/L		105	70 - 130	0	20
Metolachlor	<0.049		1.96	2.11		ug/L		107	70 - 130	1	20
Molinate	<0.099		1.96	2.01		ug/L		102	70 - 130	0	20
Naphthalene	<0.099		1.96	1.87		ug/L		95	70 - 130	0	20
Parathion	<0.099		1.96	2.27		ug/L		116	70 - 130	1	20
Pendimethalin (Penoxaline)	<0.099		1.96	2.31		ug/L		118	70 - 130	2	20
Phenanthrene	<0.040		1.96	1.84		ug/L		94	70 - 130	1	20
Propachlor	<0.049		1.96	2.14		ug/L		109	70 - 130	1	20
Pyrene	<0.049		1.96	2.13		ug/L		108	70 - 130	2	20
Simazine	<0.049		1.96	2.09		ug/L		107	70 - 130	2	20
Terbacil	<0.099		1.96	2.22		ug/L		113	70 - 130	2	20
Terbuthylazine	<0.099		1.96	2.37		ug/L		121	70 - 130	3	20
Thiobencarb	<0.099		1.96	2.14		ug/L		109	70 - 130	1	20
trans-Nonachlor	<0.049		1.96	2.04		ug/L		104	70 - 130	0	20
Trifluralin	<0.099		1.96	2.05		ug/L		104	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Nitro-m-xylene	*98*		*70 - 130*
Perylene-d12	*97*		*70 - 130*
Triphenylphosphate	*110*		*70 - 130*

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

Lab Sample ID: MB 570-524601/1-A
Matrix: Water
Analysis Batch: 526704

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524601

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*	*01/20/25 13:18*	*01/27/25 14:51*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*33 - 139*	*01/20/25 13:18*	*01/27/25 14:51*	*1*
2-Fluorobiphenyl (Surr)	*54*		*33 - 126*	*01/20/25 13:18*	*01/27/25 14:51*	*1*
2-Fluorophenol (Surr)	*51*		*12 - 120*	*01/20/25 13:18*	*01/27/25 14:51*	*1*
Nitrobenzene-d5 (Surr)	*63*		*36 - 120*	*01/20/25 13:18*	*01/27/25 14:51*	*1*
Phenol-d6 (Surr)	*31*		*10 - 120*	*01/20/25 13:18*	*01/27/25 14:51*	*1*
p-Terphenyl-d14 (Surr)	*65*		*47 - 131*	*01/20/25 13:18*	*01/27/25 14:51*	*1*

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

Lab Sample ID: MB 570-524601/1-A
Matrix: Water
Analysis Batch: 527743

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524601

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
2-Methylnaphthalene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Acenaphthene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Acenaphthylene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Anthracene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[a]anthracene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[a]pyrene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[b]fluoranthene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Benzo[k]fluoranthene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Chrysene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Fluoranthene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Fluorene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Naphthalene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Phenanthrene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1
Pyrene	<0.20		0.20		ug/L		01/20/25 13:18	01/29/25 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*28 - 127*	*01/20/25 13:18*	*01/29/25 14:16*	*1*
2-Fluorobiphenyl (Surr)	*57*		*31 - 120*	*01/20/25 13:18*	*01/29/25 14:16*	*1*
2-Fluorophenol (Surr)	*44*		*17 - 120*	*01/20/25 13:18*	*01/29/25 14:16*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 120*	*01/20/25 13:18*	*01/29/25 14:16*	*1*
Phenol-d6 (Surr)	*28*		*10 - 120*	*01/20/25 13:18*	*01/29/25 14:16*	*1*
p-Terphenyl-d14 (Surr)	*68*		*45 - 120*	*01/20/25 13:18*	*01/29/25 14:16*	*1*

Lab Sample ID: LCS 570-524601/2-A
Matrix: Water
Analysis Batch: 527743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524601

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	13.5		ug/L		68	47 - 120
2-Methylnaphthalene	20.0	14.9		ug/L		74	43 - 120
Acenaphthene	20.0	15.7		ug/L		78	60 - 132
Acenaphthylene	20.0	15.5		ug/L		78	54 - 126
Anthracene	20.0	18.1		ug/L		91	43 - 120
Benzo[a]anthracene	20.0	17.4		ug/L		87	42 - 133
Benzo[a]pyrene	20.0	18.3		ug/L		92	32 - 148
Benzo[b]fluoranthene	20.0	18.0		ug/L		90	42 - 140
Benzo[g,h,i]perylene	20.0	16.9		ug/L		84	1 - 195
Benzo[k]fluoranthene	20.0	17.8		ug/L		89	25 - 146
Chrysene	20.0	17.0		ug/L		85	44 - 140
Dibenz(a,h)anthracene	20.0	17.4		ug/L		87	1 - 200
Fluoranthene	20.0	19.2		ug/L		96	43 - 121
Fluorene	20.0	17.2		ug/L		86	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	17.8		ug/L		89	1 - 151
Naphthalene	20.0	13.4		ug/L		67	36 - 120

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

Lab Sample ID: LCS 570-524601/2-A
Matrix: Water
Analysis Batch: 527743

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524601

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Phenanthrene			20.0	18.0		ug/L		90	65 - 120		
Pyrene			20.0	17.8		ug/L		89	70 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*84*		*28 - 127*
2-Fluorobiphenyl (Surr)	*69*		*31 - 120*
2-Fluorophenol (Surr)	*54*		*17 - 120*
Nitrobenzene-d5 (Surr)	*64*		*27 - 120*
Phenol-d6 (Surr)	*37*		*10 - 120*
p-Terphenyl-d14 (Surr)	*79*		*45 - 120*

Lab Sample ID: LCSD 570-524601/3-A
Matrix: Water
Analysis Batch: 527743

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524601

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			20.0	14.5		ug/L		73	47 - 120	7	20
2-Methylnaphthalene			20.0	16.5		ug/L		82	43 - 120	10	20
Acenaphthene			20.0	17.0		ug/L		85	60 - 132	8	29
Acenaphthylene			20.0	16.9		ug/L		85	54 - 126	9	45
Anthracene			20.0	18.1		ug/L		91	43 - 120	0	40
Benzo[a]anthracene			20.0	18.2		ug/L		91	42 - 133	4	32
Benzo[a]pyrene			20.0	19.2		ug/L		96	32 - 148	5	43
Benzo[b]fluoranthene			20.0	18.6		ug/L		93	42 - 140	4	43
Benzo[g,h,i]perylene			20.0	17.6		ug/L		88	1 - 195	4	61
Benzo[k]fluoranthene			20.0	18.4		ug/L		92	25 - 146	4	38
Chrysene			20.0	17.9		ug/L		89	44 - 140	5	53
Dibenz(a,h)anthracene			20.0	17.4		ug/L		87	1 - 200	0	75
Fluoranthene			20.0	19.6		ug/L		98	43 - 121	2	40
Fluorene			20.0	18.5		ug/L		93	70 - 120	8	23
Indeno[1,2,3-cd]pyrene			20.0	18.3		ug/L		91	1 - 151	3	60
Naphthalene			20.0	14.7		ug/L		73	36 - 120	9	39
Phenanthrene			20.0	18.2		ug/L		91	65 - 120	1	24
Pyrene			20.0	18.8		ug/L		94	70 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*83*		*28 - 127*
2-Fluorobiphenyl (Surr)	*76*		*31 - 120*
2-Fluorophenol (Surr)	*59*		*17 - 120*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*
Phenol-d6 (Surr)	*39*		*10 - 120*
p-Terphenyl-d14 (Surr)	*82*		*45 - 120*

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

Lab Sample ID: MB 570-525353/6
Matrix: Water
Analysis Batch: 525353

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			01/22/25 13:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*38 - 134*		*01/22/25 13:53*	*1*

Lab Sample ID: LCS 570-525353/4
Matrix: Water
Analysis Batch: 525353

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	410		ug/L		103	78 - 120		

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

Lab Sample ID: LCSD 570-525353/5
Matrix: Water
Analysis Batch: 525353

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	411		ug/L		103	78 - 120	0	10

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*38 - 134*

Lab Sample ID: MRL 570-525353/3
Matrix: Water
Analysis Batch: 525353

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 %Recovery*	*MRL Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*38 - 134*

Lab Sample ID: 380-130371-C-3 MS
Matrix: Water
Analysis Batch: 525353

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	429		ug/L		107	68 - 122		

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

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

Lab Sample ID: 380-130371-C-3 MSD
Matrix: Water
Analysis Batch: 525353

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	433		ug/L		108	68 - 122	1	18

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

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

Lab Sample ID: MB 570-524661/1-A
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 524661

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		01/20/25 15:08	01/27/25 23:48	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		01/20/25 15:08	01/27/25 23:48	1
C8-C18	<25		25		ug/L		01/20/25 15:08	01/27/25 23:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*85*		*60 - 130*	*01/20/25 15:08*	*01/27/25 23:48*	*1*

Lab Sample ID: LCS 570-524661/2-A
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524661

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			1600	1470		ug/L		92	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*86*		*60 - 130*

Lab Sample ID: LCSD 570-524661/3-A
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 524661

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			1600	1500		ug/L		93	56 - 127	2	23

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane (Surr)	*88*		*60 - 130*

Lab Sample ID: MRL 570-524661/4-A
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524661

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			0.0200	0.0287		mg/L		144	50 - 150		

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

Lab Sample ID: MRL 570-524661/4-A
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 524661

Surrogate	MRL %Recovery	MRL Qualifier	Limits
n-Octacosane (Surr)	*90*		*60 - 130*

Lab Sample ID: 380-130371-B-3-A MS
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 524661

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<19		1640	1590		ug/L		97	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
n-Octacosane (Surr)	*112*		*60 - 130*

Lab Sample ID: 380-130371-B-3-B MSD
Matrix: Water
Analysis Batch: 526993

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 524661

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<19		1620	1540		ug/L		95	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane (Surr)	*89*		*60 - 130*

GC/MS Semi VOA

Prep Batch: 129273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	
MB 380-129273/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-129273/23-A	Lab Control Sample	Total/NA	Water	525.2	
MRL 380-129273/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-131022-AC-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-131022-AD-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	

Analysis Batch: 129391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	525.2	129273
MB 380-129273/21-A	Method Blank	Total/NA	Water	525.2	129273
LCS 380-129273/23-A	Lab Control Sample	Total/NA	Water	525.2	129273
MRL 380-129273/22-A	Lab Control Sample	Total/NA	Water	525.2	129273
380-131022-AC-1-A MS	Matrix Spike	Total/NA	Water	525.2	129273
380-131022-AD-1-A MSD	Matrix Spike Duplicate	Total/NA	Water	525.2	129273

Prep Batch: 524601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-524601/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-524601/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	

Analysis Batch: 526704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1	524601
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1	524601

Analysis Batch: 527743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	625.1 SIM	524601
MB 570-524601/1-A	Method Blank	Total/NA	Water	625.1 SIM	524601
LCS 570-524601/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	524601
LCSD 570-524601/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	524601

GC VOA

Analysis Batch: 525353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B GRO LL	
380-131009-2	TRIP BLANK	Total/NA	Water	8015B GRO LL	
MB 570-525353/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-525353/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-525353/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-525353/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-130371-C-3 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-130371-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

QC Association Summary

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

Job ID: 380-131009-1
SDG: Weekly

GC Semi VOA

Prep Batch: 524661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	3510C	
MB 570-524661/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-524661/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-524661/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-524661/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-130371-B-3-A MS	Matrix Spike	Total/NA	Water	3510C	
380-130371-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 526993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-131009-1	HALAWA SHAFT VIEWING POOL	Total/NA	Water	8015B	524661
MB 570-524661/1-A	Method Blank	Total/NA	Water	8015B	524661
LCS 570-524661/2-A	Lab Control Sample	Total/NA	Water	8015B	524661
LCSD 570-524661/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	524661
MRL 570-524661/4-A	Lab Control Sample	Total/NA	Water	8015B	524661
380-130371-B-3-A MS	Matrix Spike	Total/NA	Water	8015B	524661
380-130371-B-3-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	524661

Lab Chronicle

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

Job ID: 380-131009-1
SDG: Weekly

Client Sample ID: HALAWA SHAFT VIEWING POOL

Lab Sample ID: 380-131009-1
Date Collected: 01/14/25 10:00
Matrix: Water
Date Received: 01/17/25 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			129273	OTM3	EA POM	01/21/25 06:08
Total/NA	Analysis	525.2		1	129391	UPAC	EA POM	01/21/25 17:48
Total/NA	Prep	625.1			524601	H1SH	EET CAL 4	01/20/25 13:18
Total/NA	Analysis	625.1		1	526704	PQS1	EET CAL 4	01/27/25 16:02
Total/NA	Prep	625.1			524601	H1SH	EET CAL 4	01/20/25 13:18
Total/NA	Analysis	625.1 SIM		1	527743	PQS1	EET CAL 4	01/29/25 19:01
Total/NA	Analysis	8015B GRO LL		1	525353	A9VE	EET CAL 4	01/22/25 17:59
Total/NA	Prep	3510C			524661	TVD6	EET CAL 4	01/20/25 15:09
Total/NA	Analysis	8015B		1	526993	E5RH	EET CAL 4	01/28/25 03:20

Client Sample ID: TRIP BLANK

Lab Sample ID: 380-131009-2
Date Collected: 01/14/25 10:00
Matrix: Water
Date Received: 01/17/25 10:28

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	525353	A9VE	EET CAL 4	01/22/25 22:14

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: 380-131009-1
SDG: Weekly

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	01-31-25

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	Terbuthylazine
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
Arizona	State	AZ0830	11-16-25
Arkansas DEQ	State	88-01672	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-25

Accreditation/Certification Summary

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

Job ID: 380-131009-1
SDG: Weekly

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	02-02-25
USDA	US Federal Programs	525-23-159-97150	06-08-26
Washington	State	C916	10-11-25

Method Summary

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

Job ID: 380-131009-1
SDG: Weekly

Method	Method Description	Protocol	Laboratory
525.2	Semivolatile Organic Compounds (GC/MS)	EPA	EA POM
625.1	Semivolatile Organic Compounds (GC/MS)	EPA	EET CAL 4
625.1 SIM	Semivolatile Organic Compounds GC/MS (SIM)	EPA	EET CAL 4
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	EET CAL 4
8015B	Diesel Range Organics (DRO) (GC) Low Level	SW846	EET CAL 4
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CAL 4
5030C	Purge and Trap	SW846	EET CAL 4
525.2	Extraction of Semivolatile Compounds	EPA	EA POM
625.1	Liquid-Liquid Extraction	40CFR136A	EET CAL 4

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.
EPA = US Environmental Protection Agency
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EA POM = Eurofins Eaton Analytical Pomona, 941 Corporate Center Drive, Pomona, CA 91768-2642, TEL (626)386-1100
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Sample Summary

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

Job ID: 380-131009-1
SDG: Weekly

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-131009-1	HALAWA SHAFT VIEWING POOL	Water	01/14/25 10:00	01/17/25 10:28
380-131009-2	TRIP BLANK	Water	01/14/25 10:00	01/17/25 10:28

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona CA 91768-2642
Phone (626) 386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Ryan Greer	Lab PM: Arada, Rachelle	Carrier Tracking No(s)	COC No: 380-28005-2757 1
Client Contact: Dr Ron Fenstemacher	Phone: 808-748-5840	E-Mail: Rachelle.Arada@et.eurofinsus com	State of Origin: HI	Page: Page 1 of 1
Company: City & County of Honolulu	PWSID:			Job #:
Address: 630 South Beretania Street Chemistry Lab	Due Date Requested:			
City: Honolulu	TAT Requested (days):			
State Zip: HI, 96843	Compliance Project: Δ Yes Δ No			
Phone: 808-748-5091(Tel)	PO #: C20525101 exp 05312023			
Email: RFENSTEMACHER@hbws org	WO #:			
Project Name: RED-HILL/HBWS Sites Event Desc: RUSH Weekly Red Hill	Project #: 38001111			
Site: Hawaii	SSOW#:			

Analysis Requested

Preservation Codes:
R - NaThioSO4
RA - NaThio/HCl
Q - Na2SO3
QA - Na2SO3/HCl
Y - Trizma
I - NH4 Acetate

380-131009 COC

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	625.1, 626.1_SIM	8015B_GRO_LL - (MOD) GRO	8015B_DRO_LL_CS - HNL Ranges C10-C24/C24-C36/C8-C18	525.2_PREC - (MOD) 525plus Plus TICs	537 1_DW_PREC - 537 1 Full List	533 - All Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				R	RA	Q	QA	Y	I		
Halawa Shaft Viewing Pool	1/14/25	1000	G	Water			2	3	2	2				
TRIP BLANK	1/14/25	1000	G	Water				2						

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested I, II, III, IV Other (specify)

Special Instructions/QC Requirements.

Empty Kit Relinquished by: | Date: | Time:

Method of Shipment: FEDEX (1) 7714 5427 6676 (2) 7714 5427 6687

Relinquished [redacted]	Date/Time: 1/15/25 1300	Company HBWS	Received by	Date/Time:	Company
Relinquished	Date/Time:	Company	Received by	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 751A (1) 3.1°-0.0°-3.1° (2) 2.0°-0.0°-2.0° GEL-FROZEN

Ver 04/02/2024

Eurofins Eaton Analytical Pomona
941 Corporate Center Drive
Pomona, CA 91768-2642
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Loc: 380
131009

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Arada, Rachelle	Carrier Tracking No(s): N/A	COC No: 380-183857.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Rachelle.Arada@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-131009-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 1/30/2025			
City: Tustin	TAT Requested (days): N/A			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other:
N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015B_DRO_LL_CS/3510C_LL HNL Ranges: C10-C24/C24-C36/C8-C18	8015B_GRO_LL/5030C (MOD) GRO	625.1_SIM/625_Prep (MOD) Extended PAH List	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
HALAWA SHAFT VIEWING POOL (380-131009-1)	1/14/25	10:00 Hawaiian	G	Water			X	X	X	7	MRLs are needed. Confirm any hits >RL.
TRIP BLANK (380-131009-2)	1/14/25	10:00 Hawaiian	G	Water				X		2	MRLs are needed.

380-131009 Chain of Custody

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 analysis/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 said compliance to Eurofins Eaton Analytical, LLC.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	[signature]	1/10/25 1000	Eaton	Erin Lemm	1/18/25 1000	WP
2	Erin Lemm	1/18/25 1048	WP			
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-131009-1
SDG Number: Weekly

Login Number: 131009
List Number: 1
Creator: Edrosa, Rey

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
Samples were received on ice.	True	
Cooler(s) Temperature is acceptable.	True	
Cooler(s) Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and is legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
ClO4 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: 380-131009-1
SDG Number: Weekly

Login Number: 131009
List Number: 2
Creator: Skinner, Alma D

List Source: Eurofins Calscience
List Creation: 01/20/25 09:08 AM

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	3.3
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	