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ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
630 South Beretania Street
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Honolulu, Hawaii 96843

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JOB DESCRIPTION

RED-HILL
RUSH Weekly Red Hill

JOB NUMBER

380-103360-1

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

See page two for job notes and contact information.

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

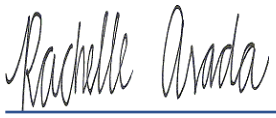

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Table of Contents

Definitions/Glossary

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

Job ID: 380-103360-1

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.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

GC/MS Semi VOA TICs

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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
380-103360-1

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 7/10/2024 9:55 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 4.8°C and 4.9°C.

GC/MS Semi VOA
Method 625.1_SIM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with preparation batch 570-460222 and analytical batch 570-461962 were outside control limits: HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate) (380-103360-3[MSD]). The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 625.1_SIM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 570-460222 and analytical batch 570-461962 was outside control limits. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) re-extraction; therefore data has been reported.

Method 625.1_SIM: Surrogate recovery for the following sample was outside of acceptance limits: HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate) (380-103360-3[MSD]). There was insufficient sample to perform a re-extraction; therefore, the data have been reported.

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 570-459748 and analytical batch 570-462177 recovered outside control limits for the following analytes: C10-C28.

Method 8015B_DRO_LL_CS: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 570-459748 and analytical batch 570-462177 was outside control limits.

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: 380-103360-1

Client Sample ID: MOANALUA WELLS
PWSID Number: HI0000331

Lab Sample ID: 380-103360-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.025		0.0097		ug/L	1		525.2	Total/NA

Client Sample ID: TB: MOANALUA WELLS

Lab Sample ID: 380-103360-2

No Detections.

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-103360-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
Dieldrin	0.040		0.0096		ug/L	1		525.2	Total/NA

Client Sample ID: TB: HALAWA WELLS UNITS 1&2

Lab Sample ID: 380-103360-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MOANALUA WELLS

Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-1

Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2,4'-DDD	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2,4'-DDE	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2,4'-DDT	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2,4-Dinitrotoluene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2,6-Dinitrotoluene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
2-Methylnaphthalene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
4,4'-DDD	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
4,4'-DDE	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
4,4'-DDT	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Acenaphthene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Acenaphthylene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Acetochlor	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Alachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
alpha-BHC	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
alpha-Chlordane	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Anthracene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:28	1
Atrazine	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Benz(a)anthracene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Benzo[a]pyrene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:28	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:28	1
Benzo[g,h,i]perylene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:28	1
beta-BHC	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		07/12/24 09:10	07/12/24 17:28	1
Bromacil	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Butachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Butylbenzylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:28	1
Chlorobenzilate	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Chloroneb	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Chlorothalonil (Draconil, Bravo)	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Chlorpyrifos	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Chrysene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:28	1
delta-BHC	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		07/12/24 09:10	07/12/24 17:28	1
Dibenz(a,h)anthracene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Diclorvos (DDVP)	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Dieldrin	**0.025**		0.0097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Diethylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:28	1
Dimethylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:28	1
Di-n-butyl phthalate	<0.97		0.97		ug/L		07/12/24 09:10	07/12/24 17:28	1
Di-n-octyl phthalate	<0.097	*1	0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Endosulfan I (Alpha)	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Endosulfan II (Beta)	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Endosulfan sulfate	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Endrin	<0.0097	^3+	0.0097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Endrin aldehyde	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
EPTC	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Fluoranthene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1

Client Sample ID: MOANALUA WELLS
Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-1
Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
gamma-Chlordane	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Heptachlor	<0.0097		0.0097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Heptachlor epoxide (isomer B)	<0.0097	^3+	0.0097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Hexachlorobenzene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Hexachlorocyclopentadiene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Isophorone	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Lindane	<0.0097		0.0097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Malathion	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Methoxychlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Metolachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Molinate	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Naphthalene	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Parathion	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Pendimethalin (Penoxaline)	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Phenanthrene	<0.039		0.039		ug/L		07/12/24 09:10	07/12/24 17:28	1
Propachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Pyrene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Simazine	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Terbacil	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Terbuthylazine	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Thiobencarb	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		07/12/24 09:10	07/12/24 17:28	1
trans-Nonachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:28	1
Trifluralin	<0.097		0.097		ug/L		07/12/24 09:10	07/12/24 17:28	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*			*N/A*	*07/12/24 09:10*	*07/12/24 17:28*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*92*		*70 - 130*	*07/12/24 09:10*	*07/12/24 17:28*	*1*
Perylene-d12	*101*		*70 - 130*	*07/12/24 09:10*	*07/12/24 17:28*	*1*
Triphenylphosphate	*102*		*70 - 130*	*07/12/24 09:10*	*07/12/24 17:28*	*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		07/15/24 05:12	07/19/24 14:42	1
2-Methylnaphthalene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Acenaphthene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Acenaphthylene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Anthracene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Benzo[a]anthracene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Benzo[a]pyrene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Benzo[b]fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Benzo[k]fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Chrysene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Fluoranthene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1

Client Sample ID: MOANALUA WELLS

Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-1
Matrix: Drinking Water
PWSID Number: HI0000331

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Naphthalene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Phenanthrene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1
Pyrene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*28 - 127*	*07/15/24 05:12*	*07/19/24 14:42*	*1*
2-Fluorobiphenyl (Surr)	*72*		*31 - 120*	*07/15/24 05:12*	*07/19/24 14:42*	*1*
2-Fluorophenol (Surr)	*48*		*17 - 120*	*07/15/24 05:12*	*07/19/24 14:42*	*1*
Nitrobenzene-d5 (Surr)	*77*		*27 - 120*	*07/15/24 05:12*	*07/19/24 14:42*	*1*
Phenol-d6 (Surr)	*29*		*10 - 120*	*07/15/24 05:12*	*07/19/24 14:42*	*1*
p-Terphenyl-d14 (Surr)	*90*		*45 - 120*	*07/15/24 05:12*	*07/19/24 14:42*	*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-Pentenal, (E)-	*45*	*T J N*	*ug/L*		*2.79*	*1576-87-0*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
1-Hexene, 3,3,5-trimethyl-	*19*	*T J N*	*ug/L*		*2.87*	*13427-43-5*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
Cyclohexane, 1-methyl-2-propyl-	*28*	*T J N*	*ug/L*		*2.98*	*4291-79-6*	*07/15/24 05:12*	*07/30/24 14:14*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*33 - 139*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
2-Fluorobiphenyl (Surr)	*72*		*33 - 126*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
2-Fluorophenol (Surr)	*48*		*12 - 120*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
Nitrobenzene-d5 (Surr)	*79*		*36 - 120*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
Phenol-d6 (Surr)	*31*		*10 - 120*	*07/15/24 05:12*	*07/30/24 14:14*	*1*
p-Terphenyl-d14 (Surr)	*75*		*47 - 131*	*07/15/24 05:12*	*07/30/24 14:14*	*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			07/16/24 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*38 - 134*		*07/16/24 16:30*	*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)	<27		27		ug/L		07/12/24 09:30	07/20/24 09:00	1
Motor Oil Range Organics [C24-C36]	<27		27		ug/L		07/12/24 09:30	07/20/24 09:00	1
C8-C18	<27		27		ug/L		07/12/24 09:30	07/20/24 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*112*		*60 - 130*	*07/12/24 09:30*	*07/20/24 09:00*	*1*

Client Sample ID: TB: MOANALUA WELLS

Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-2
Matrix: Water

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			07/16/24 21:00	1

Client Sample ID: TB: MOANALUA WELLS

Lab Sample ID: 380-103360-2

Date Collected: 07/08/24 10:12

Matrix: Water

Date Received: 07/10/24 09:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*82*		*38 - 134*		*07/16/24 21:00*	*1*

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-103360-3

Date Collected: 07/08/24 10:39

Matrix: Drinking Water

Date Received: 07/10/24 09:55

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		07/12/24 09:10	07/12/24 17:48	1
2,4'-DDD	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
2,4'-DDE	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
2,4'-DDT	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
2,4-Dinitrotoluene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
2,6-Dinitrotoluene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
2-Methylnaphthalene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
4,4'-DDD	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
4,4'-DDE	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
4,4'-DDT	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Acenaphthene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Acenaphthylene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Acetochlor	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Alachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
alpha-BHC	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
alpha-Chlordane	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Anthracene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:48	1
Atrazine	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Benz(a)anthracene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Benzo[a]pyrene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:48	1
Benzo[b]fluoranthene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:48	1
Benzo[g,h,i]perylene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Benzo[k]fluoranthene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:48	1
beta-BHC	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Bis(2-ethylhexyl) phthalate	<0.58		0.58		ug/L		07/12/24 09:10	07/12/24 17:48	1
Bromacil	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Butachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Butylbenzylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:48	1
Chlorobenzilate	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Chloroneb	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Chlorothalonil (Draconil, Bravo)	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Chlorpyrifos	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Chrysene	<0.019		0.019		ug/L		07/12/24 09:10	07/12/24 17:48	1
delta-BHC	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Di(2-ethylhexyl)adipate	<0.58		0.58		ug/L		07/12/24 09:10	07/12/24 17:48	1
Dibenz(a,h)anthracene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Diclorvos (DDVP)	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Dieldrin	**0.040**		0.0096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Diethylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:48	1
Dimethylphthalate	<0.48		0.48		ug/L		07/12/24 09:10	07/12/24 17:48	1
Di-n-butyl phthalate	<0.96		0.96		ug/L		07/12/24 09:10	07/12/24 17:48	1
Di-n-octyl phthalate	<0.096	*1	0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 07/08/24 10:39
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-3
Matrix: Drinking Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Endosulfan I (Alpha)	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Endosulfan II (Beta)	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Endosulfan sulfate	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Endrin	<0.0096	^3+	0.0096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Endrin aldehyde	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
EPTC	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Fluoranthene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Fluorene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
gamma-Chlordane	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Heptachlor	<0.0096		0.0096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Heptachlor epoxide (isomer B)	<0.0096	^3+	0.0096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Hexachlorobenzene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Hexachlorocyclopentadiene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Indeno[1,2,3-cd]pyrene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Isophorone	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Lindane	<0.0096		0.0096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Malathion	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Methoxychlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Metolachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Molinate	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Naphthalene	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Parathion	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Pendimethalin (Penoxaline)	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Phenanthrene	<0.038		0.038		ug/L		07/12/24 09:10	07/12/24 17:48	1
Propachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Pyrene	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Simazine	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Terbacil	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Terbuthylazine	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Thiobencarb	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 17:48	1
Total Permethrin (mixed isomers)	<0.19		0.19		ug/L		07/12/24 09:10	07/12/24 17:48	1
trans-Nonachlor	<0.048		0.048		ug/L		07/12/24 09:10	07/12/24 17:48	1
Trifluralin	<0.096		0.096		ug/L		07/12/24 09:10	07/12/24 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*	*07/12/24 09:10*	*07/12/24 17:48*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*97*		*70 - 130*	*07/12/24 09:10*	*07/12/24 17:48*	*1*
Perylene-d12	*101*		*70 - 130*	*07/12/24 09:10*	*07/12/24 17:48*	*1*
Triphenylphosphate	*108*		*70 - 130*	*07/12/24 09:10*	*07/12/24 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	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
2-Methylnaphthalene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Acenaphthene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Acenaphthylene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Anthracene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Benzo[a]anthracene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Date Collected: 07/08/24 10:39
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-3
Matrix: Drinking Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Benzo[b]fluoranthene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Benzo[g,h,i]perylene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Benzo[k]fluoranthene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Chrysene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Dibenz(a,h)anthracene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Fluoranthene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Fluorene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Indeno[1,2,3-cd]pyrene	<0.19		0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Naphthalene	<0.19	F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Phenanthrene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1
Pyrene	<0.19	F1 F2	0.19		ug/L		07/15/24 05:12	07/19/24 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*28 - 127*	*07/15/24 05:12*	*07/19/24 15:49*	*1*
2-Fluorobiphenyl (Surr)	*76*		*31 - 120*	*07/15/24 05:12*	*07/19/24 15:49*	*1*
2-Fluorophenol (Surr)	*51*		*17 - 120*	*07/15/24 05:12*	*07/19/24 15:49*	*1*
Nitrobenzene-d5 (Surr)	*83*		*27 - 120*	*07/15/24 05:12*	*07/19/24 15:49*	*1*
Phenol-d6 (Surr)	*32*		*10 - 120*	*07/15/24 05:12*	*07/19/24 15:49*	*1*
p-Terphenyl-d14 (Surr)	*94*		*45 - 120*	*07/15/24 05:12*	*07/19/24 15:49*	*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-	*45*	*T J N*	*ug/L*		*2.79*	*107-86-8*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
Cyclohexane, 1-methyl-2-propyl-	*29*	*T J N*	*ug/L*		*2.98*	*4291-79-6*	*07/15/24 05:12*	*07/30/24 14:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*33 - 139*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
2-Fluorobiphenyl (Surr)	*81*		*33 - 126*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
2-Fluorophenol (Surr)	*47*		*12 - 120*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
Nitrobenzene-d5 (Surr)	*82*		*36 - 120*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
Phenol-d6 (Surr)	*30*		*10 - 120*	*07/15/24 05:12*	*07/30/24 14:37*	*1*
p-Terphenyl-d14 (Surr)	*81*		*47 - 131*	*07/15/24 05:12*	*07/30/24 14:37*	*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			07/16/24 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*38 - 134*		*07/16/24 17:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<26		26		ug/L		07/12/24 09:30	07/20/24 10:03	1
Motor Oil Range Organics [C24-C36]	<26		26		ug/L		07/12/24 09:30	07/20/24 10:03	1
C8-C18	<26		26		ug/L		07/12/24 09:30	07/20/24 10:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*102*		*60 - 130*	*07/12/24 09:30*	*07/20/24 10:03*	*1*

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

Job ID: 380-103360-1

Client Sample ID: TB: HALAWA WELLS UNITS 1&2
Date Collected: 07/08/24 10:39
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-4
Matrix: Water

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			07/16/24 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*38 - 134*		*07/16/24 21:26*	*1*

Action Limit Summary

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

Job ID: 380-103360-1

Client Sample ID: MOANALUA WELLS

Lab Sample ID: 380-103360-1

PWSID Number: HI0000331

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL 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	<0.0097	^3+	ug/L	2	0.0097	525.2	Total/NA
Heptachlor	<0.0097		ug/L	0.4	0.0097	525.2	Total/NA
Heptachlor epoxide (isomer B)	<0.0097	^3+	ug/L	0.2	0.0097	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	<0.0097		ug/L	0.2	0.0097	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

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1

Lab Sample ID: 380-103360-3

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	^3+	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	^3+	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	F2	ug/L	0.2	0.19	625.1 SIM	Total/NA

Surrogate Summary

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

Job ID: 380-103360-1

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

Matrix: Drinking 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)
380-103360-1	MOANALUA WELLS	92	101	102
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	97	101	108

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		2NMX	PRY	TPP
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)
380-103336-J-1-A MS	Matrix Spike	93	100	119
380-103353-AY-1-A DU	Duplicate	93	100	105
LCS 380-98718/23-A	Lab Control Sample	93	104	117
LCSD 380-98718/24-A	Lab Control Sample Dup	93	101	119
MB 380-98718/21-A	Method Blank	90	103	106
MRL 380-98718/22-A	Lab Control Sample	93	102	115

Surrogate Legend

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

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

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

		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)
380-103360-1	MOANALUA WELLS	70	72	48	79	31	75
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	76	81	47	82	30	81

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 - 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)
MB 570-460222/1-A	Method Blank	66	64	49	68	32	78

Surrogate Summary

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

Job ID: 380-103360-1

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL6 = Phenol-d6 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

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

		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)
380-103360-1	MOANALUA WELLS	94	72	48	77	29	90
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	110	80	60	79	38	88
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	105	69	45	61	30	84
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	98	76	51	83	32	94
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	110	74	49	66	31	86
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate)	40	25 S1-	16 S1-	23 S1-	10	32 S1-

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)
LCS 570-460222/2-A	Lab Control Sample	107	75	58	79	38	82
LCSD 570-460222/3-A	Lab Control Sample Dup	115	78	60	75	41	90
MB 570-460222/1-A	Method Blank	97	61	53	70	36	85

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL6 = Phenol-d6 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(38-134)
380-103360-1	MOANALUA WELLS	95

Surrogate Summary

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

Job ID: 380-103360-1

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (38-134)
380-103360-1 MS	MOANALUA WELLS (Matrix Spi	99
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	97
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	92
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	95
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate)	100

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) BFB1 (38-134)
380-103360-2	TB: MOANALUA WELLS	82
380-103360-4	TB: HALAWA WELLS UNITS 1&2	80
LCS 570-460706/4	Lab Control Sample	99
LCSD 570-460706/5	Lab Control Sample Dup	101
MB 570-460706/6	Method Blank	97
MRL 570-460706/3	Lab Control Sample	94

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits) OTCSN1 (60-130)
380-103360-1	MOANALUA WELLS	112
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	88
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	115
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	102
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	115
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate)	109

Surrogate Legend

OTCSN = n-Octacosane (Surr)

Surrogate Summary

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

Job ID: 380-103360-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**OTCSN1 (60-130)**
LCS 570-459748/2-A	Lab Control Sample	110
LCSD 570-459748/3-A	Lab Control Sample Dup	91
MB 570-459748/1-A	Method Blank	105
MRL 570-459748/4-A	Lab Control Sample	108

Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

Lab Sample ID: MB 380-98718/21-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98718

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2,4'-DDD	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2,4'-DDE	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2,4'-DDT	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2,4-Dinitrotoluene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2,6-Dinitrotoluene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
2-Methylnaphthalene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
4,4'-DDD	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
4,4'-DDE	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
4,4'-DDT	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Acenaphthene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Acenaphthylene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Acetochlor	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Alachlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
alpha-BHC	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
alpha-Chlordane	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Anthracene	<0.020		0.020		ug/L		07/12/24 08:00	07/12/24 16:07	1
Atrazine	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Benz(a)anthracene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Benzo[a]pyrene	<0.020		0.020		ug/L		07/12/24 08:00	07/12/24 16:07	1
Benzo[b]fluoranthene	<0.020		0.020		ug/L		07/12/24 08:00	07/12/24 16:07	1
Benzo[g,h,i]perylene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Benzo[k]fluoranthene	<0.020		0.020		ug/L		07/12/24 08:00	07/12/24 16:07	1
beta-BHC	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Bis(2-ethylhexyl) phthalate	<0.59		0.59		ug/L		07/12/24 08:00	07/12/24 16:07	1
Bromacil	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Butachlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Butylbenzylphthalate	<0.49		0.49		ug/L		07/12/24 08:00	07/12/24 16:07	1
Chlorobenzilate	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Chloroneb	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Chlorothalonil (Draconil, Bravo)	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Chlorpyrifos	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Chrysene	<0.020		0.020		ug/L		07/12/24 08:00	07/12/24 16:07	1
delta-BHC	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Di(2-ethylhexyl)adipate	<0.59		0.59		ug/L		07/12/24 08:00	07/12/24 16:07	1
Dibenz(a,h)anthracene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Diclorvos (DDVP)	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Dieldrin	<0.0098		0.0098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Diethylphthalate	<0.49		0.49		ug/L		07/12/24 08:00	07/12/24 16:07	1
Dimethylphthalate	<0.49		0.49		ug/L		07/12/24 08:00	07/12/24 16:07	1
Di-n-butyl phthalate	<0.98		0.98		ug/L		07/12/24 08:00	07/12/24 16:07	1
Di-n-octyl phthalate	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Endosulfan I (Alpha)	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Endosulfan II (Beta)	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Endosulfan sulfate	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Endrin	<0.0098		0.0098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Endrin aldehyde	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
EPTC	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1

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

Lab Sample ID: MB 380-98718/21-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98718

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Fluorene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
gamma-Chlordane	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Heptachlor	<0.0098		0.0098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Heptachlor epoxide (isomer B)	<0.0098		0.0098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Hexachlorobenzene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Hexachlorocyclopentadiene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Indeno[1,2,3-cd]pyrene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Isophorone	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Lindane	<0.0098		0.0098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Malathion	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Methoxychlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Metolachlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Molinate	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Naphthalene	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Parathion	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Pendimethalin (Penoxaline)	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Phenanthrene	<0.039		0.039		ug/L		07/12/24 08:00	07/12/24 16:07	1
Propachlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Pyrene	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Simazine	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Terbacil	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Terbuthylazine	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Thiobencarb	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1
Total Permethrin (mixed isomers)	<0.20		0.20		ug/L		07/12/24 08:00	07/12/24 16:07	1
trans-Nonachlor	<0.049		0.049		ug/L		07/12/24 08:00	07/12/24 16:07	1
Trifluralin	<0.098		0.098		ug/L		07/12/24 08:00	07/12/24 16:07	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclopentasiloxane, decamethyl-	*0.654*	*T J N*	*ug/L*		*2.59*	*541-02-6*	*07/12/24 08:00*	*07/12/24 16:07*	*1*
Cyclohexasiloxane, dodecamethyl-	*0.699*	*T J N*	*ug/L*		*3.13*	*540-97-6*	*07/12/24 08:00*	*07/12/24 16:07*	*1*
Unknown	*0.635*	*T J*	*ug/L*		*4.30*	*N/A*	*07/12/24 08:00*	*07/12/24 16:07*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Nitro-m-xylene	*90*		*70 - 130*	*07/12/24 08:00*	*07/12/24 16:07*	*1*
Perylene-d12	*103*		*70 - 130*	*07/12/24 08:00*	*07/12/24 16:07*	*1*
Triphenylphosphate	*106*		*70 - 130*	*07/12/24 08:00*	*07/12/24 16:07*	*1*

Lab Sample ID: LCS 380-98718/23-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	1.96	2.02		ug/L		103	70 - 130
2,4'-DDD	1.96	2.10		ug/L		107	70 - 130
2,4'-DDE	1.96	2.10		ug/L		107	70 - 130
2,4'-DDT	1.96	1.99		ug/L		101	70 - 130
2,4-Dinitrotoluene	1.96	1.75		ug/L		89	70 - 130

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

Lab Sample ID: LCS 380-98718/23-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	1.96	1.79		ug/L		91	70 - 130
2-Methylnaphthalene	1.96	1.99		ug/L		101	70 - 130
4,4'-DDD	1.96	1.89		ug/L		96	70 - 130
4,4'-DDE	1.96	2.06		ug/L		105	70 - 130
4,4'-DDT	1.96	1.88		ug/L		96	70 - 130
Acenaphthene	1.96	1.93		ug/L		98	70 - 130
Acenaphthylene	1.96	2.06		ug/L		105	70 - 130
Acetochlor	1.96	2.13		ug/L		108	70 - 130
Alachlor	1.96	1.96		ug/L		100	70 - 130
alpha-BHC	1.96	1.80		ug/L		92	70 - 130
alpha-Chlordane	1.96	2.45		ug/L		125	70 - 130
Anthracene	1.96	1.98		ug/L		101	70 - 130
Atrazine	1.96	2.16		ug/L		110	70 - 130
Benz(a)anthracene	1.96	1.85		ug/L		94	70 - 130
Benzo[a]pyrene	1.96	2.03		ug/L		103	70 - 130
Benzo[b]fluoranthene	1.96	2.00		ug/L		102	70 - 130
Benzo[g,h,i]perylene	1.96	2.24		ug/L		114	70 - 130
Benzo[k]fluoranthene	1.96	2.08		ug/L		106	70 - 130
beta-BHC	1.96	1.84		ug/L		94	70 - 130
Bis(2-ethylhexyl) phthalate	1.96	2.12		ug/L		108	70 - 130
Bromacil	1.96	1.73		ug/L		88	70 - 130
Butachlor	1.96	1.99		ug/L		101	70 - 130
Butylbenzylphthalate	1.96	2.03		ug/L		103	70 - 130
Chlorobenzilate	1.96	1.71		ug/L		87	70 - 130
Chloroneb	1.96	1.81		ug/L		92	70 - 130
Chlorothalonil (Draconil, Bravo)	1.96	1.99		ug/L		101	70 - 130
Chlorpyrifos	1.96	1.94		ug/L		99	70 - 130
Chrysene	1.96	1.87		ug/L		95	70 - 130
delta-BHC	1.96	1.94		ug/L		99	70 - 130
Di(2-ethylhexyl)adipate	1.96	2.02		ug/L		103	70 - 130
Dibenz(a,h)anthracene	1.96	2.25		ug/L		114	70 - 130
Diclorvos (DDVP)	1.96	2.02		ug/L		103	70 - 130
Dieldrin	1.96	2.01		ug/L		102	70 - 130
Diethylphthalate	1.96	1.95		ug/L		99	70 - 130
Dimethylphthalate	1.96	2.04		ug/L		104	70 - 130
Di-n-butyl phthalate	3.93	4.19		ug/L		107	70 - 130
Di-n-octyl phthalate	1.96	1.87		ug/L		95	70 - 130
Endosulfan I (Alpha)	1.96	1.95		ug/L		99	70 - 130
Endosulfan II (Beta)	1.96	1.92		ug/L		98	70 - 130
Endosulfan sulfate	1.96	1.98		ug/L		101	70 - 130
Endrin	1.96	1.91		ug/L		97	70 - 130
Endrin aldehyde	1.96	1.65		ug/L		84	60 - 130
EPTC	1.96	1.99		ug/L		101	70 - 130
Fluoranthene	1.96	2.01		ug/L		103	70 - 130
Fluorene	1.96	2.00		ug/L		102	70 - 130
gamma-Chlordane	1.96	2.41		ug/L		123	70 - 130
Heptachlor	1.96	2.00		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	1.96	2.36		ug/L		120	70 - 130
Hexachlorobenzene	1.96	1.99		ug/L		101	70 - 130

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

Lab Sample ID: LCS 380-98718/23-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachlorocyclopentadiene			1.96	1.96		ug/L		100	70 - 130		
Indeno[1,2,3-cd]pyrene			1.96	2.27		ug/L		116	70 - 130		
Isophorone			1.96	1.99		ug/L		101	70 - 130		
Lindane			1.96	1.81		ug/L		92	70 - 130		
Malathion			1.96	2.01		ug/L		102	70 - 130		
Methoxychlor			1.96	1.94		ug/L		99	70 - 130		
Metolachlor			1.96	2.26		ug/L		115	70 - 130		
Molinate			1.96	2.07		ug/L		105	70 - 130		
Naphthalene			1.96	1.87		ug/L		95	70 - 130		
Parathion			1.96	1.99		ug/L		101	70 - 130		
Pendimethalin (Penoxaline)			1.96	2.06		ug/L		105	70 - 130		
Phenanthrene			1.96	1.90		ug/L		97	70 - 130		
Propachlor			1.96	2.11		ug/L		108	70 - 130		
Pyrene			1.96	1.89		ug/L		96	70 - 130		
Simazine			1.96	1.94		ug/L		99	70 - 130		
Terbacil			1.96	1.91		ug/L		97	70 - 130		
Terbuthylazine			1.96	2.12		ug/L		108	70 - 130		
Thiobencarb			1.96	2.25		ug/L		114	70 - 130		
trans-Nonachlor			1.96	2.35		ug/L		120	70 - 130		
Trifluralin			1.96	1.86		ug/L		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*104*		*70 - 130*
Triphenylphosphate	*117*		*70 - 130*

Lab Sample ID: LCSD 380-98718/24-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 98718

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			1.96	2.10		ug/L		107	70 - 130	4	20
2,4'-DDD			1.96	2.10		ug/L		107	70 - 130	0	20
2,4'-DDE			1.96	2.01		ug/L		102	70 - 130	4	20
2,4'-DDT			1.96	1.83		ug/L		93	70 - 130	8	20
2,4-Dinitrotoluene			1.96	1.89		ug/L		97	70 - 130	8	20
2,6-Dinitrotoluene			1.96	1.91		ug/L		97	70 - 130	7	20
2-Methylnaphthalene			1.96	2.07		ug/L		105	70 - 130	4	20
4,4'-DDD			1.96	1.90		ug/L		97	70 - 130	0	20
4,4'-DDE			1.96	1.90		ug/L		97	70 - 130	8	20
4,4'-DDT			1.96	1.72		ug/L		88	70 - 130	9	20
Acenaphthene			1.96	2.02		ug/L		103	70 - 130	5	20
Acenaphthylene			1.96	2.16		ug/L		110	70 - 130	4	20
Acetochlor			1.96	2.18		ug/L		111	70 - 130	2	20
Alachlor			1.96	2.01		ug/L		102	70 - 130	2	20
alpha-BHC			1.96	1.90		ug/L		97	70 - 130	5	20
alpha-Chlordane			1.96	2.42		ug/L		123	70 - 130	1	20
Anthracene			1.96	2.07		ug/L		105	70 - 130	4	20

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

Lab Sample ID: LCSD 380-98718/24-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Atrazine	1.96	2.29		ug/L		117	70 - 130	6	20
Benz(a)anthracene	1.96	1.87		ug/L		95	70 - 130	1	20
Benzo[a]pyrene	1.96	1.88		ug/L		96	70 - 130	8	20
Benzo[b]fluoranthene	1.96	1.93		ug/L		98	70 - 130	4	20
Benzo[g,h,i]perylene	1.96	1.94		ug/L		99	70 - 130	14	20
Benzo[k]fluoranthene	1.96	1.94		ug/L		99	70 - 130	7	20
beta-BHC	1.96	1.96		ug/L		100	70 - 130	6	20
Bis(2-ethylhexyl) phthalate	1.96	1.75		ug/L		89	70 - 130	19	20
Bromacil	1.96	1.89		ug/L		96	70 - 130	9	20
Butachlor	1.96	2.05		ug/L		104	70 - 130	3	20
Butylbenzylphthalate	1.96	2.11		ug/L		108	70 - 130	4	20
Chlorobenzilate	1.96	1.78		ug/L		91	70 - 130	4	20
Chloroneb	1.96	1.88		ug/L		96	70 - 130	4	20
Chlorothalonil (Draconil, Bravo)	1.96	2.08		ug/L		106	70 - 130	4	20
Chlorpyrifos	1.96	2.00		ug/L		102	70 - 130	3	20
Chrysene	1.96	1.84		ug/L		94	70 - 130	1	20
delta-BHC	1.96	1.98		ug/L		101	70 - 130	2	20
Di(2-ethylhexyl)adipate	1.96	1.70		ug/L		87	70 - 130	17	20
Dibenz(a,h)anthracene	1.96	1.99		ug/L		102	70 - 130	12	20
Diclorvos (DDVP)	1.96	2.14		ug/L		109	70 - 130	6	20
Dieldrin	1.96	2.09		ug/L		107	70 - 130	4	20
Diethylphthalate	1.96	2.04		ug/L		104	70 - 130	4	20
Dimethylphthalate	1.96	2.11		ug/L		108	70 - 130	3	20
Di-n-butyl phthalate	3.93	4.17		ug/L		106	70 - 130	0	20
Di-n-octyl phthalate	1.96	1.51	*1	ug/L		77	70 - 130	22	20
Endosulfan I (Alpha)	1.96	1.90		ug/L		97	70 - 130	2	20
Endosulfan II (Beta)	1.96	1.99		ug/L		101	70 - 130	3	20
Endosulfan sulfate	1.96	2.04		ug/L		104	70 - 130	3	20
Endrin	1.96	1.93		ug/L		98	70 - 130	1	20
Endrin aldehyde	1.96	1.56		ug/L		79	60 - 130	6	20
EPTC	1.96	2.06		ug/L		105	70 - 130	4	20
Fluoranthene	1.96	2.17		ug/L		111	70 - 130	8	20
Fluorene	1.96	2.12		ug/L		108	70 - 130	6	20
gamma-Chlordane	1.96	2.39		ug/L		122	70 - 130	1	20
Heptachlor	1.96	2.05		ug/L		104	70 - 130	2	20
Heptachlor epoxide (isomer B)	1.96	2.37		ug/L		121	70 - 130	1	20
Hexachlorobenzene	1.96	2.08		ug/L		106	70 - 130	4	20
Hexachlorocyclopentadiene	1.96	2.02		ug/L		103	70 - 130	3	20
Indeno[1,2,3-cd]pyrene	1.96	1.98		ug/L		101	70 - 130	14	20
Isophorone	1.96	2.08		ug/L		106	70 - 130	5	20
Lindane	1.96	1.91		ug/L		97	70 - 130	6	20
Malathion	1.96	2.09		ug/L		107	70 - 130	4	20
Methoxychlor	1.96	2.10		ug/L		107	70 - 130	8	20
Metolachlor	1.96	2.31		ug/L		118	70 - 130	2	20
Molinate	1.96	2.16		ug/L		110	70 - 130	4	20
Naphthalene	1.96	1.95		ug/L		99	70 - 130	4	20
Parathion	1.96	2.10		ug/L		107	70 - 130	5	20
Pendimethalin (Penoxaline)	1.96	2.14		ug/L		109	70 - 130	4	20
Phenanthrene	1.96	2.01		ug/L		102	70 - 130	6	20

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

Lab Sample ID: LCSD 380-98718/24-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Propachlor	1.96	2.19		ug/L		112	70 - 130	4	20
Pyrene	1.96	2.03		ug/L		104	70 - 130	8	20
Simazine	1.96	2.13		ug/L		109	70 - 130	9	20
Terbacil	1.96	2.11		ug/L		107	70 - 130	10	20
Terbuthylazine	1.96	2.24		ug/L		114	70 - 130	5	20
Thiobencarb	1.96	2.36		ug/L		120	70 - 130	5	20
trans-Nonachlor	1.96	2.30		ug/L		117	70 - 130	2	20
Trifluralin	1.96	1.97		ug/L		101	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*101*		*70 - 130*
Triphenylphosphate	*119*		*70 - 130*

Lab Sample ID: MRL 380-98718/22-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.0976	0.108		ug/L		111	50 - 150
2,4'-DDD	0.0976	0.114		ug/L		117	50 - 150
2,4'-DDE	0.0976	0.0979	J	ug/L		100	50 - 150
2,4'-DDT	0.0976	0.119		ug/L		122	50 - 150
2,4-Dinitrotoluene	0.0976	0.106		ug/L		108	50 - 150
2,6-Dinitrotoluene	0.0976	0.106		ug/L		109	50 - 150
2-Methylnaphthalene	0.0976	0.103		ug/L		106	50 - 150
4,4'-DDD	0.0976	0.124		ug/L		128	50 - 150
4,4'-DDE	0.0976	0.117		ug/L		119	50 - 150
4,4'-DDT	0.0976	0.113		ug/L		116	50 - 150
Acenaphthene	0.0976	0.0999		ug/L		102	50 - 150
Acenaphthylene	0.0976	0.103		ug/L		106	50 - 150
Acetochlor	0.0976	0.107		ug/L		110	50 - 150
Alachlor	0.0488	0.0475	J	ug/L		97	50 - 150
alpha-BHC	0.0976	0.101		ug/L		104	50 - 150
alpha-Chlordane	0.0244	0.0332	J	ug/L		136	50 - 150
Anthracene	0.0195	0.0240		ug/L		123	50 - 150
Atrazine	0.0488	<0.047		ug/L		96	50 - 150
Benz(a)anthracene	0.0488	0.0444	J	ug/L		91	50 - 150
Benzo[a]pyrene	0.0195	0.0200		ug/L		102	50 - 150
Benzo[b]fluoranthene	0.0195	0.0178	J	ug/L		91	50 - 150
Benzo[g,h,i]perylene	0.0488	0.0445	J	ug/L		91	50 - 150
Benzo[k]fluoranthene	0.0195	0.0184	J	ug/L		94	50 - 150
beta-BHC	0.0976	0.102		ug/L		104	50 - 150
Bis(2-ethylhexyl) phthalate	0.585	0.609		ug/L		104	50 - 150
Bromacil	0.0976	0.110		ug/L		113	50 - 150
Butachlor	0.0488	0.0645		ug/L		132	50 - 150
Butylbenzylphthalate	0.488	0.541		ug/L		111	50 - 150
Chlorobenzilate	0.0976	0.0842	J	ug/L		86	50 - 150

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

Lab Sample ID: MRL 380-98718/22-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloroneb	0.0976	0.0867	J	ug/L		89	50 - 150
Chlorothalonil (Draconil, Bravo)	0.0976	0.112		ug/L		115	50 - 150
Chlorpyrifos	0.0488	0.0594		ug/L		122	50 - 150
Chrysene	0.0195	0.0210		ug/L		108	50 - 150
delta-BHC	0.0976	0.107		ug/L		109	50 - 150
Di(2-ethylhexyl)adipate	0.585	0.657		ug/L		112	50 - 150
Dibenz(a,h)anthracene	0.0488	0.0531		ug/L		109	50 - 150
Diclorvos (DDVP)	0.0488	0.0492		ug/L		101	50 - 150
Dieldrin	0.00976	<0.0068		ug/L		67	50 - 150
Diethylphthalate	0.488	0.505		ug/L		104	50 - 150
Dimethylphthalate	0.488	0.534		ug/L		109	50 - 150
Di-n-butyl phthalate	0.488	0.484	J	ug/L		99	49 - 243
Di-n-octyl phthalate	0.0976	0.104		ug/L		106	50 - 150
Endosulfan I (Alpha)	0.0976	0.0895	J	ug/L		92	50 - 150
Endosulfan II (Beta)	0.0976	0.110		ug/L		113	50 - 150
Endosulfan sulfate	0.0976	0.122		ug/L		125	50 - 150
Endrin	0.00976	0.0148	^3+	ug/L		152	50 - 150
Endrin aldehyde	0.0976	0.102		ug/L		104	50 - 150
EPTC	0.0976	0.0925	J	ug/L		95	50 - 150
Fluoranthene	0.0976	0.0995		ug/L		102	50 - 150
Fluorene	0.0488	0.0504		ug/L		103	50 - 150
gamma-Chlordane	0.0244	0.0317	J	ug/L		130	50 - 150
Heptachlor	0.00976	0.0111		ug/L		114	50 - 150
Heptachlor epoxide (isomer B)	0.00976	0.0147	^3+	ug/L		151	50 - 150
Hexachlorobenzene	0.0488	0.0457	J	ug/L		94	50 - 150
Hexachlorocyclopentadiene	0.0488	0.0377	J	ug/L		77	50 - 150
Indeno[1,2,3-cd]pyrene	0.0488	0.0544		ug/L		111	50 - 150
Isophorone	0.0976	0.117		ug/L		120	50 - 150
Lindane	0.00976	0.0111		ug/L		113	50 - 150
Malathion	0.0976	0.113		ug/L		116	50 - 150
Methoxychlor	0.0488	0.0629		ug/L		129	50 - 150
Metolachlor	0.0488	0.0584		ug/L		120	50 - 150
Molinate	0.0976	0.109		ug/L		112	50 - 150
Naphthalene	0.0976	0.102		ug/L		104	50 - 150
Parathion	0.0976	0.101		ug/L		104	50 - 150
Pendimethalin (Penoxaline)	0.0976	0.101		ug/L		104	50 - 150
Phenanthrene	0.0390	0.0429		ug/L		110	50 - 150
Propachlor	0.0488	0.0527		ug/L		108	50 - 150
Pyrene	0.0488	0.0494		ug/L		101	50 - 150
Simazine	0.0488	0.0488	J	ug/L		100	50 - 150
Terbacil	0.0976	0.0913	J	ug/L		94	50 - 150
Terbuthylazine	0.0976	0.0983		ug/L		101	50 - 150
Thiobencarb	0.0976	0.113		ug/L		115	50 - 150
trans-Nonachlor	0.0244	0.0352	J	ug/L		144	50 - 150
Trifluralin	0.0976	0.0985		ug/L		101	50 - 150

Surrogate	*MRL %Recovery*	*MRL Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*

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

Lab Sample ID: MRL 380-98718/22-A
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98718

Surrogate	MRL %Recovery	MRL Qualifier	Limits
Perylene-d12	*102*		*70 - 130*
Triphenylphosphate	*115*		*70 - 130*

Lab Sample ID: 380-103336-J-1-A MS
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.098		1.96	2.06		ug/L		105	70 - 130
2,4'-DDD	<0.098		1.96	2.13		ug/L		109	70 - 130
2,4'-DDE	<0.098		1.96	2.11		ug/L		108	70 - 130
2,4'-DDT	<0.098		1.96	1.98		ug/L		101	70 - 130
2,4-Dinitrotoluene	<0.098		1.96	1.95		ug/L		100	70 - 130
2,6-Dinitrotoluene	<0.098		1.96	1.94		ug/L		99	70 - 130
2-Methylnaphthalene	<0.098		1.96	2.08		ug/L		106	70 - 130
4,4'-DDD	<0.098		1.96	1.96		ug/L		100	70 - 130
4,4'-DDE	<0.098		1.96	2.08		ug/L		106	70 - 130
4,4'-DDT	<0.098		1.96	1.90		ug/L		97	70 - 130
Acenaphthene	<0.098		1.96	2.02		ug/L		103	70 - 130
Acenaphthylene	<0.098		1.96	2.14		ug/L		109	70 - 130
Acetochlor	<0.098		1.96	2.09		ug/L		107	70 - 130
Alachlor	<0.049		1.96	1.96		ug/L		100	70 - 130
alpha-BHC	<0.098		1.96	1.87		ug/L		96	70 - 130
alpha-Chlordane	<0.049		1.96	2.42		ug/L		123	70 - 130
Anthracene	<0.020		1.96	1.77		ug/L		91	70 - 130
Atrazine	<0.049		1.96	2.34		ug/L		119	70 - 130
Benz(a)anthracene	<0.049		1.96	1.90		ug/L		97	70 - 130
Benzo[a]pyrene	<0.020		1.96	1.88		ug/L		96	70 - 130
Benzo[b]fluoranthene	<0.020		1.96	2.02		ug/L		103	70 - 130
Benzo[g,h,i]perylene	<0.049		1.96	2.13		ug/L		109	70 - 130
Benzo[k]fluoranthene	<0.020		1.96	2.07		ug/L		106	70 - 130
beta-BHC	<0.098		1.96	1.95		ug/L		100	70 - 130
Bis(2-ethylhexyl) phthalate	<0.59		1.96	1.81		ug/L		92	70 - 130
Bromacil	<0.098		1.96	1.95		ug/L		100	70 - 130
Butachlor	<0.049		1.96	1.99		ug/L		101	70 - 130
Butylbenzylphthalate	<0.49		1.96	2.08		ug/L		106	70 - 130
Chlorobenzilate	<0.098		1.96	1.60		ug/L		82	70 - 130
Chloroneb	<0.098		1.96	1.90		ug/L		97	70 - 130
Chlorothalonil (Draconil, Bravo)	<0.098		1.96	2.11		ug/L		108	70 - 130
Chlorpyrifos	<0.049		1.96	1.97		ug/L		101	70 - 130
Chrysene	<0.020		1.96	1.92		ug/L		98	70 - 130
delta-BHC	<0.098		1.96	1.95		ug/L		100	70 - 130
Di(2-ethylhexyl)adipate	<0.59		1.96	1.92		ug/L		98	70 - 130
Dibenz(a,h)anthracene	<0.049		1.96	2.17		ug/L		111	70 - 130
Diclorvos (DDVP)	<0.049		1.96	2.23		ug/L		114	70 - 130
Dieldrin	<0.0098		1.96	1.96		ug/L		100	70 - 130
Diethylphthalate	<0.49		1.96	2.03		ug/L		104	70 - 130
Dimethylphthalate	<0.49		1.96	2.10		ug/L		107	70 - 130

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

Lab Sample ID: 380-103336-J-1-A MS
Matrix: Water
Analysis Batch: 98808

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	<0.98		3.92	4.02		ug/L		103	70 - 130
Di-n-octyl phthalate	<0.098	*1	1.96	1.58		ug/L		81	70 - 130
Endosulfan I (Alpha)	<0.098		1.96	1.86		ug/L		95	70 - 130
Endosulfan II (Beta)	<0.098		1.96	1.93		ug/L		99	70 - 130
Endosulfan sulfate	<0.098		1.96	1.99		ug/L		102	70 - 130
Endrin	<0.0098	^3+	1.96	1.90		ug/L		97	70 - 130
Endrin aldehyde	<0.098		1.96	1.56		ug/L		80	60 - 130
EPTC	<0.098		1.96	2.02		ug/L		103	70 - 130
Fluoranthene	<0.098		1.96	2.19		ug/L		112	70 - 130
Fluorene	<0.049		1.96	2.10		ug/L		107	70 - 130
gamma-Chlordane	<0.049		1.96	2.41		ug/L		123	70 - 130
Heptachlor	<0.0098		1.96	2.00		ug/L		102	70 - 130
Heptachlor epoxide (isomer B)	<0.0098	^3+	1.96	2.33		ug/L		119	70 - 130
Hexachlorobenzene	<0.049		1.96	2.09		ug/L		107	70 - 130
Hexachlorocyclopentadiene	<0.049		1.96	2.08		ug/L		106	70 - 130
Indeno[1,2,3-cd]pyrene	<0.049		1.96	2.19		ug/L		112	70 - 130
Isophorone	<0.098		1.96	2.03		ug/L		104	70 - 130
Lindane	<0.0098		1.96	1.91		ug/L		98	70 - 130
Malathion	<0.098		1.96	2.03		ug/L		104	70 - 130
Methoxychlor	<0.049		1.96	1.97		ug/L		100	70 - 130
Metolachlor	<0.049		1.96	2.27		ug/L		116	70 - 130
Molinate	<0.098		1.96	2.16		ug/L		110	70 - 130
Naphthalene	<0.098		1.96	1.92		ug/L		98	70 - 130
Parathion	<0.098		1.96	2.03		ug/L		104	70 - 130
Pendimethalin (Penoxaline)	<0.098		1.96	2.10		ug/L		107	70 - 130
Phenanthrene	<0.039		1.96	2.04		ug/L		104	70 - 130
Propachlor	<0.049		1.96	2.18		ug/L		112	70 - 130
Pyrene	<0.049		1.96	2.03		ug/L		104	70 - 130
Simazine	<0.049		1.96	2.19		ug/L		112	70 - 130
Terbacil	<0.098		1.96	2.23		ug/L		114	70 - 130
Terbuthylazine	<0.098		1.96	2.26		ug/L		115	70 - 130
Thiobencarb	<0.098		1.96	2.35		ug/L		120	70 - 130
trans-Nonachlor	<0.049		1.96	2.34		ug/L		119	70 - 130
Trifluralin	<0.098		1.96	1.92		ug/L		98	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*100*		*70 - 130*
Triphenylphosphate	*119*		*70 - 130*

Lab Sample ID: 380-103353-AY-1-A DU
Matrix: Water
Analysis Batch: 98990

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
1-Methylnaphthalene	<0.097		<0.096		ug/L		NC	20
2,4'-DDD	<0.097		<0.096		ug/L		NC	20
2,4'-DDE	<0.097		<0.096		ug/L		NC	20

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

Lab Sample ID: 380-103353-AY-1-A DU
Matrix: Water
Analysis Batch: 98990

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
2,4'-DDT	<0.097			<0.096		ug/L				NC	20
2,4-Dinitrotoluene	<0.097			<0.096		ug/L				NC	20
2,6-Dinitrotoluene	<0.097			<0.096		ug/L				NC	20
2-Methylnaphthalene	<0.097			<0.096		ug/L				NC	20
4,4'-DDD	<0.097			<0.096		ug/L				NC	20
4,4'-DDE	<0.097			<0.096		ug/L				NC	20
4,4'-DDT	<0.097			<0.096		ug/L				NC	20
Acenaphthene	<0.097			<0.096		ug/L				NC	20
Acenaphthylene	<0.097			<0.096		ug/L				NC	20
Acetochlor	<0.097			<0.096		ug/L				NC	20
Alachlor	<0.048			<0.048		ug/L				NC	20
alpha-BHC	<0.097			<0.096		ug/L				NC	20
alpha-Chlordane	<0.048			<0.048		ug/L				NC	20
Anthracene	<0.019			<0.019		ug/L				NC	20
Atrazine	<0.048			<0.048		ug/L				NC	20
Benz(a)anthracene	<0.048			<0.048		ug/L				NC	20
Benzo[a]pyrene	<0.019			<0.019		ug/L				NC	20
Benzo[b]fluoranthene	<0.019			<0.019		ug/L				NC	20
Benzo[g,h,i]perylene	<0.048			<0.048		ug/L				NC	20
Benzo[k]fluoranthene	<0.019			<0.019		ug/L				NC	20
beta-BHC	<0.097			<0.096		ug/L				NC	20
Bis(2-ethylhexyl) phthalate	<0.58			<0.58		ug/L				NC	20
Bromacil	<0.097			<0.096		ug/L				NC	20
Butachlor	<0.048			<0.048		ug/L				NC	20
Butylbenzylphthalate	<0.48			<0.48		ug/L				NC	20
Chlorobenzilate	<0.097			<0.096		ug/L				NC	20
Chloroneb	<0.097			<0.096		ug/L				NC	20
Chlorothalonil (Draconil, Bravo)	<0.097			<0.096		ug/L				NC	20
Chlorpyrifos	<0.048			<0.048		ug/L				NC	20
Chrysene	<0.019			<0.019		ug/L				NC	20
delta-BHC	<0.097			<0.096		ug/L				NC	20
Di(2-ethylhexyl)adipate	<0.58			<0.58		ug/L				NC	20
Dibenz(a,h)anthracene	<0.048			<0.048		ug/L				NC	20
Diclorvos (DDVP)	<0.048			<0.048		ug/L				NC	20
Dieldrin	<0.0097			<0.0096		ug/L				NC	20
Diethylphthalate	<0.48			<0.48		ug/L				NC	20
Dimethylphthalate	<0.48			<0.48		ug/L				NC	20
Di-n-butyl phthalate	<0.97			<0.96		ug/L				NC	20
Di-n-octyl phthalate	<0.097	*1		<0.096	*1	ug/L				NC	20
Endosulfan I (Alpha)	<0.097			<0.096		ug/L				NC	20
Endosulfan II (Beta)	<0.097			<0.096		ug/L				NC	20
Endosulfan sulfate	<0.097			<0.096		ug/L				NC	20
Endrin	<0.0097	^3+		<0.0096		ug/L				NC	20
Endrin aldehyde	<0.097			<0.096		ug/L				NC	20
EPTC	<0.097			<0.096		ug/L				NC	20
Fluoranthene	<0.097			<0.096		ug/L				NC	20
Fluorene	<0.048			<0.048		ug/L				NC	20
gamma-Chlordane	<0.048			<0.048		ug/L				NC	20
Heptachlor	<0.0097			<0.0096		ug/L				NC	20

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

Lab Sample ID: 380-103353-AY-1-A DU
Matrix: Water
Analysis Batch: 98990

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 98718

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Heptachlor epoxide (isomer B)	<0.0097	^3+		<0.0096		ug/L				NC	20
Hexachlorobenzene	<0.048			<0.048		ug/L				NC	20
Hexachlorocyclopentadiene	<0.048			<0.048		ug/L				NC	20
Indeno[1,2,3-cd]pyrene	<0.048			<0.048		ug/L				NC	20
Isophorone	<0.097			<0.096		ug/L				NC	20
Lindane	<0.0097			<0.0096		ug/L				NC	20
Malathion	<0.097			<0.096		ug/L				NC	20
Methoxychlor	<0.048			<0.048		ug/L				NC	20
Metolachlor	<0.048			<0.048		ug/L				NC	20
Molinate	<0.097			<0.096		ug/L				NC	20
Naphthalene	<0.097			<0.096		ug/L				NC	20
Parathion	<0.097			<0.096		ug/L				NC	20
Pendimethalin (Penoxaline)	<0.097			<0.096		ug/L				NC	20
Phenanthrene	<0.039			<0.038		ug/L				NC	20
Propachlor	<0.048			<0.048		ug/L				NC	20
Pyrene	<0.048			<0.048		ug/L				NC	20
Simazine	<0.048			<0.048		ug/L				NC	20
Terbacil	<0.097			<0.096		ug/L				NC	20
Terbuthylazine	<0.097			<0.096		ug/L				NC	20
Thiobencarb	<0.097			<0.096		ug/L				NC	20
Total Permethrin (mixed isomers)	<0.19			<0.19		ug/L				NC	20
trans-Nonachlor	<0.048			<0.048		ug/L				NC	20
Trifluralin	<0.097			<0.096		ug/L				NC	20

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
2-Nitro-m-xylene	*93*		*70 - 130*
Perylene-d12	*100*		*70 - 130*
Triphenylphosphate	*105*		*70 - 130*

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

Lab Sample ID: MB 570-460222/1-A
Matrix: Water
Analysis Batch: 465420

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460222

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*	*07/15/24 05:12*	*07/30/24 13:00*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*33 - 139*	*07/15/24 05:12*	*07/30/24 13:00*	*1*
2-Fluorobiphenyl (Surr)	*64*		*33 - 126*	*07/15/24 05:12*	*07/30/24 13:00*	*1*
2-Fluorophenol (Surr)	*49*		*12 - 120*	*07/15/24 05:12*	*07/30/24 13:00*	*1*
Nitrobenzene-d5 (Surr)	*68*		*36 - 120*	*07/15/24 05:12*	*07/30/24 13:00*	*1*
Phenol-d6 (Surr)	*32*		*10 - 120*	*07/15/24 05:12*	*07/30/24 13:00*	*1*
p-Terphenyl-d14 (Surr)	*78*		*47 - 131*	*07/15/24 05:12*	*07/30/24 13:00*	*1*

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

Lab Sample ID: MB 570-460222/1-A
Matrix: Water
Analysis Batch: 461962

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 460222

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
2-Methylnaphthalene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Acenaphthene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Acenaphthylene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Anthracene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Benzo[a]anthracene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Benzo[a]pyrene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Benzo[b]fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Benzo[k]fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Chrysene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Fluoranthene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Fluorene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Naphthalene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Phenanthrene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1
Pyrene	<0.20		0.20		ug/L		07/15/24 05:12	07/19/24 10:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*28 - 127*	*07/15/24 05:12*	*07/19/24 10:37*	*1*
2-Fluorobiphenyl (Surr)	*61*		*31 - 120*	*07/15/24 05:12*	*07/19/24 10:37*	*1*
2-Fluorophenol (Surr)	*53*		*17 - 120*	*07/15/24 05:12*	*07/19/24 10:37*	*1*
Nitrobenzene-d5 (Surr)	*70*		*27 - 120*	*07/15/24 05:12*	*07/19/24 10:37*	*1*
Phenol-d6 (Surr)	*36*		*10 - 120*	*07/15/24 05:12*	*07/19/24 10:37*	*1*
p-Terphenyl-d14 (Surr)	*85*		*45 - 120*	*07/15/24 05:12*	*07/19/24 10:37*	*1*

Lab Sample ID: LCS 570-460222/2-A
Matrix: Water
Analysis Batch: 461962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	20.0	15.0		ug/L		75	47 - 120
2-Methylnaphthalene	20.0	15.0		ug/L		75	43 - 120
Acenaphthene	20.0	15.4		ug/L		77	60 - 132
Acenaphthylene	20.0	18.1		ug/L		91	54 - 126
Anthracene	20.0	17.0		ug/L		85	43 - 120
Benzo[a]anthracene	20.0	17.8		ug/L		89	42 - 133
Benzo[a]pyrene	20.0	18.8		ug/L		94	32 - 148
Benzo[b]fluoranthene	20.0	20.5		ug/L		102	42 - 140
Benzo[g,h,i]perylene	20.0	20.0		ug/L		100	1 - 195
Benzo[k]fluoranthene	20.0	19.8		ug/L		99	25 - 146
Chrysene	20.0	16.8		ug/L		84	44 - 140
Dibenz(a,h)anthracene	20.0	17.9		ug/L		89	1 - 200
Fluoranthene	20.0	18.2		ug/L		91	43 - 121
Fluorene	20.0	16.3		ug/L		81	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	18.0		ug/L		90	1 - 151
Naphthalene	20.0	14.5		ug/L		73	36 - 120

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

Lab Sample ID: LCS 570-460222/2-A
Matrix: Water
Analysis Batch: 461962

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 460222

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Phenanthrene			20.0	16.1		ug/L		81	65 - 120		
Pyrene			20.0	16.5		ug/L		82	70 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*107*		*28 - 127*
2-Fluorobiphenyl (Surr)	*75*		*31 - 120*
2-Fluorophenol (Surr)	*58*		*17 120*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*
Phenol-d6 (Surr)	*38*		*10 - 120*
p-Terphenyl-d14 (Surr)	*82*		*45 - 120*

Lab Sample ID: LCSD 570-460222/3-A
Matrix: Water
Analysis Batch: 461962

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 460222

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			20.0	14.3		ug/L		72	47 - 120	4	20
2-Methylnaphthalene			20.0	14.1		ug/L		70	43 - 120	6	20
Acenaphthene			20.0	16.2		ug/L		81	60 - 132	6	29
Acenaphthylene			20.0	19.3		ug/L		97	54 - 126	6	45
Anthracene			20.0	18.3		ug/L		92	43 - 120	8	40
Benzo[a]anthracene			20.0	19.0		ug/L		95	42 - 133	7	32
Benzo[a]pyrene			20.0	20.0		ug/L		100	32 - 148	6	43
Benzo[b]fluoranthene			20.0	21.7		ug/L		108	42 - 140	6	43
Benzo[g,h,i]perylene			20.0	21.5		ug/L		107	1 - 195	7	61
Benzo[k]fluoranthene			20.0	20.7		ug/L		104	25 - 146	5	38
Chrysene			20.0	17.9		ug/L		89	44 - 140	6	53
Dibenz(a,h)anthracene			20.0	18.8		ug/L		94	1 - 200	5	75
Fluoranthene			20.0	19.4		ug/L		97	43 - 121	6	40
Fluorene			20.0	17.3		ug/L		86	70 - 120	6	23
Indeno[1,2,3-cd]pyrene			20.0	19.3		ug/L		96	1 - 151	7	60
Naphthalene			20.0	13.7		ug/L		68	36 - 120	6	39
Phenanthrene			20.0	17.3		ug/L		87	65 - 120	7	24
Pyrene			20.0	17.9		ug/L		89	70 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*115*		*28 - 127*
2-Fluorobiphenyl (Surr)	*78*		*31 - 120*
2-Fluorophenol (Surr)	*60*		*17 - 120*
Nitrobenzene-d5 (Surr)	*75*		*27 - 120*
Phenol-d6 (Surr)	*41*		*10 - 120*
p-Terphenyl-d14 (Surr)	*90*		*45 - 120*

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

Lab Sample ID: 380-103360-1 MS
Matrix: Drinking Water
Analysis Batch: 461962

Client Sample ID: MOANALUA WELLS (Matrix Spike)
Prep Type: Total/NA
Prep Batch: 460222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.3	14.4		ug/L		74	36 - 120
2-Methylnaphthalene	<0.19		19.3	14.3		ug/L		74	32 - 124
Acenaphthene	<0.19		19.3	15.7		ug/L		81	47 - 145
Acenaphthylene	<0.19		19.3	18.4		ug/L		95	33 - 145
Anthracene	<0.19		19.3	17.0		ug/L		88	27 - 133
Benzo[a]anthracene	<0.19		19.3	18.0		ug/L		93	33 - 143
Benzo[a]pyrene	<0.19		19.3	17.9		ug/L		93	17 - 163
Benzo[b]fluoranthene	<0.19		19.3	19.8		ug/L		103	24 - 159
Benzo[g,h,i]perylene	<0.19		19.3	19.4		ug/L		100	1 - 219
Benzo[k]fluoranthene	<0.19		19.3	19.2		ug/L		99	11 - 162
Chrysene	<0.19		19.3	17.0		ug/L		88	17 - 168
Dibenz(a,h)anthracene	<0.19		19.3	17.4		ug/L		90	1 - 227
Fluoranthene	<0.19		19.3	18.0		ug/L		93	26 - 137
Fluorene	<0.19		19.3	16.2		ug/L		84	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.3	17.1		ug/L		88	1 - 171
Naphthalene	<0.19		19.3	14.0		ug/L		73	21 - 133
Phenanthrene	<0.19		19.3	16.1		ug/L		83	54 - 120
Pyrene	<0.19		19.3	17.1		ug/L		89	52 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*110*		*28 - 127*
2-Fluorobiphenyl (Surr)	*80*		*31 - 120*
2-Fluorophenol (Surr)	*60*		*17 - 120*
Nitrobenzene-d5 (Surr)	*79*		*27 - 120*
Phenol-d6 (Surr)	*38*		*10 - 120*
p-Terphenyl-d14 (Surr)	*88*		*45 - 120*

Lab Sample ID: 380-103360-1 MSD
Matrix: Drinking Water
Analysis Batch: 461962

Client Sample ID: MOANALUA WELLS (Matrix Spike Duplicate)
Prep Type: Total/NA
Prep Batch: 460222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19		19.3	11.6		ug/L		60	36 - 120	21	30
2-Methylnaphthalene	<0.19		19.3	11.4		ug/L		59	32 - 124	23	30
Acenaphthene	<0.19		19.3	14.1		ug/L		73	47 - 145	11	48
Acenaphthylene	<0.19		19.3	16.4		ug/L		85	33 - 145	11	74
Anthracene	<0.19		19.3	16.4		ug/L		85	27 - 133	4	66
Benzo[a]anthracene	<0.19		19.3	17.5		ug/L		91	33 - 143	3	53
Benzo[a]pyrene	<0.19		19.3	17.5		ug/L		91	17 - 163	3	72
Benzo[b]fluoranthene	<0.19		19.3	19.3		ug/L		100	24 - 159	3	71
Benzo[g,h,i]perylene	<0.19		19.3	18.8		ug/L		97	1 - 219	3	97
Benzo[k]fluoranthene	<0.19		19.3	18.5		ug/L		96	11 - 162	4	63
Chrysene	<0.19		19.3	16.6		ug/L		86	17 - 168	3	87
Dibenz(a,h)anthracene	<0.19		19.3	16.7		ug/L		87	1 - 227	4	126
Fluoranthene	<0.19		19.3	17.5		ug/L		91	26 - 137	3	66
Fluorene	<0.19		19.3	15.1		ug/L		78	59 - 121	7	38
Indeno[1,2,3-cd]pyrene	<0.19		19.3	16.6		ug/L		86	1 - 171	3	99
Naphthalene	<0.19		19.3	11.0		ug/L		57	21 - 133	24	65

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

Lab Sample ID: 380-103360-1 MSD — **Client Sample ID: MOANALUA WELLS (Matrix Spike Duplicate)**
Matrix: Drinking Water — **Prep Type: Total/NA**
Analysis Batch: 461962 — **Prep Batch: 460222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	<0.19		19.3	15.7		ug/L		82	54 - 120	2	39
Pyrene	<0.19		19.3	16.7		ug/L		87	52 - 120	3	49

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*28 - 127*
2-Fluorobiphenyl (Surr)	*69*		*31 - 120*
2-Fluorophenol (Surr)	*45*		*17 120*
Nitrobenzene-d5 (Surr)	*61*		*27 - 120*
Phenol-d6 (Surr)	*30*		*10 - 120*
p-Terphenyl-d14 (Surr)	*84*		*45 - 120*

Lab Sample ID: 380-103360-3 MS — **Client Sample ID: HALAWA WELLS UNITS 1 & 2 (Matrix Spike)**
Matrix: Drinking Water — **Prep Type: Total/NA**
Analysis Batch: 461962 — **Prep Batch: 460222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19	F1 F2	19.4	13.1		ug/L		68	36 - 120
2-Methylnaphthalene	<0.19	F1 F2	19.4	12.8		ug/L		66	32 - 124
Acenaphthene	<0.19	F1 F2	19.4	15.3		ug/L		79	47 - 145
Acenaphthylene	<0.19	F1 F2	19.4	17.9		ug/L		92	33 - 145
Anthracene	<0.19	F2	19.4	17.5		ug/L		90	27 - 133
Benzo[a]anthracene	<0.19	F2	19.4	18.4		ug/L		95	33 - 143
Benzo[a]pyrene	<0.19	F2	19.4	18.8		ug/L		97	17 - 163
Benzo[b]fluoranthene	<0.19	F2	19.4	20.5		ug/L		106	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	20.1		ug/L		104	1 - 219
Benzo[k]fluoranthene	<0.19	F2	19.4	20.0		ug/L		103	11 - 162
Chrysene	<0.19	F2	19.4	17.5		ug/L		91	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	17.5		ug/L		90	1 - 227
Fluoranthene	<0.19	F2	19.4	19.2		ug/L		99	26 - 137
Fluorene	<0.19	F1 F2	19.4	16.2		ug/L		84	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	17.5		ug/L		90	1 - 171
Naphthalene	<0.19	F2	19.4	12.3		ug/L		63	21 - 133
Phenanthrene	<0.19	F1 F2	19.4	16.8		ug/L		87	54 - 120
Pyrene	<0.19	F1 F2	19.4	17.1		ug/L		89	52 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*110*		*28 - 127*
2-Fluorobiphenyl (Surr)	*74*		*31 - 120*
2-Fluorophenol (Surr)	*49*		*17 - 120*
Nitrobenzene-d5 (Surr)	*66*		*27 - 120*
Phenol-d6 (Surr)	*31*		*10 - 120*
p-Terphenyl-d14 (Surr)	*86*		*45 - 120*

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

Lab Sample ID: 380-103360-3 MSD — **Client Sample ID: HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate)**
Matrix: Drinking Water — **Prep Type: Total/NA**
Analysis Batch: 461962 — **Prep Batch: 460222**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19	F1 F2	19.4	4.64	F1 F2	ug/L		24	36 - 120	95	30
2-Methylnaphthalene	<0.19	F1 F2	19.4	4.49	F1 F2	ug/L		23	32 - 124	96	30
Acenaphthene	<0.19	F1 F2	19.4	5.38	F1 F2	ug/L		28	47 - 145	96	48
Acenaphthylene	<0.19	F1 F2	19.4	6.29	F1 F2	ug/L		32	33 - 145	96	74
Anthracene	<0.19	F2	19.4	6.48	F2	ug/L		33	27 - 133	92	66
Benzo[a]anthracene	<0.19	F2	19.4	6.92	F2	ug/L		36	33 - 143	91	53
Benzo[a]pyrene	<0.19	F2	19.4	6.75	F2	ug/L		35	17 - 163	94	72
Benzo[b]fluoranthene	<0.19	F2	19.4	7.35	F2	ug/L		38	24 - 159	95	71
Benzo[g,h,i]perylene	<0.19		19.4	7.23		ug/L		37	1 - 219	94	97
Benzo[k]fluoranthene	<0.19	F2	19.4	7.58	F2	ug/L		39	11 - 162	90	63
Chrysene	<0.19	F2	19.4	6.85	F2	ug/L		35	17 - 168	88	87
Dibenz(a,h)anthracene	<0.19		19.4	6.25		ug/L		32	1 - 227	95	126
Fluoranthene	<0.19	F2	19.4	7.16	F2	ug/L		37	26 - 137	91	66
Fluorene	<0.19	F1 F2	19.4	5.92	F1 F2	ug/L		30	59 - 121	93	38
Indeno[1,2,3-cd]pyrene	<0.19		19.4	6.16		ug/L		32	1 - 171	96	99
Naphthalene	<0.19	F2	19.4	4.39	F2	ug/L		23	21 - 133	94	65
Phenanthrene	<0.19	F1 F2	19.4	6.35	F1 F2	ug/L		33	54 - 120	90	39
Pyrene	<0.19	F1 F2	19.4	6.48	F1 F2	ug/L		33	52 - 120	90	49

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*40*		*28 - 127*
2-Fluorobiphenyl (Surr)	*25*	*S1-*	*31 - 120*
2-Fluorophenol (Surr)	*16*	*S1-*	*17 - 120*
Nitrobenzene-d5 (Surr)	*23*	*S1-*	*27 - 120*
Phenol-d6 (Surr)	*10*		*10 - 120*
p-Terphenyl-d14 (Surr)	*32*	*S1-*	*45 - 120*

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

Lab Sample ID: MB 570-460706/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 460706

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10		ug/L			07/16/24 13:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*38 - 134*		*07/16/24 13:13*	*1*

Lab Sample ID: LCS 570-460706/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 460706

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	401		ug/L		100	78 - 120

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

Lab Sample ID: LCS 570-460706/4
Matrix: Water
Analysis Batch: 460706

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		38 - 134

Lab Sample ID: LCSD 570-460706/5
Matrix: Water
Analysis Batch: 460706

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	400		ug/L		100	78 - 120	0	10

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

Lab Sample ID: MRL 570-460706/3
Matrix: Water
Analysis Batch: 460706

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	11.6		ug/L		116	50 - 150		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		38 - 134

Lab Sample ID: 380-103360-1 MS
Matrix: Drinking Water
Analysis Batch: 460706

Client Sample ID: MOANALUA WELLS (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	371		ug/L		93	68 - 122		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		38 - 134

Lab Sample ID: 380-103360-1 MSD
Matrix: Drinking Water
Analysis Batch: 460706

Client Sample ID: MOANALUA WELLS (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	379		ug/L		95	68 - 122	2	18

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

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

Lab Sample ID: 380-103360-3 MS
Matrix: Drinking Water
Analysis Batch: 460706

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (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	372		ug/L		93	68 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*38 - 134*

Lab Sample ID: 380-103360-3 MSD
Matrix: Drinking Water
Analysis Batch: 460706

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (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	376		ug/L		94	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 570-459748/1-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 459748

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1
Motor Oil Range Organics [C24-C36]	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1
C8-C18	<25		25		ug/L		07/12/24 09:29	07/20/24 06:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane (Surr)	*105*		*60 - 130*	*07/12/24 09:29*	*07/20/24 06:13*	*1*

Lab Sample ID: LCS 570-459748/2-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			1600	1420		ug/L		89	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane (Surr)	*110*		*60 - 130*

Lab Sample ID: LCSD 570-459748/3-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28			1600	1110	*1	ug/L		70	56 - 127	24	23

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

Lab Sample ID: LCSD 570-459748/3-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 459748

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane (Surr)	91		60 - 130

Lab Sample ID: MRL 570-459748/4-A
Matrix: Water
Analysis Batch: 462177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 459748

Analyte			Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28			0.0200	<0.020		mg/L		87	50 - 150		

Surrogate	MRL %Recovery	MRL Qualifier	Limits
n-Octacosane (Surr)	108		60 - 130

Lab Sample ID: 380-103360-1 MS
Matrix: Drinking Water
Analysis Batch: 462177

Client Sample ID: MOANALUA WELLS (Matrix Spike)
Prep Type: Total/NA
Prep Batch: 459748

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<27	F2 *1	1750	1340		ug/L		77	70 - 130		

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

Lab Sample ID: 380-103360-1 MSD
Matrix: Drinking Water
Analysis Batch: 462177

Client Sample ID: MOANALUA WELLS (Matrix Spike Duplicate)
Prep Type: Total/NA
Prep Batch: 459748

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<27	F2 *1	1720	1680	F2	ug/L		98	70 - 130	22	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
n-Octacosane (Surr)	115		60 - 130

Lab Sample ID: 380-103360-3 MS
Matrix: Drinking Water
Analysis Batch: 462177

Client Sample ID: HALAWA WELLS UNITS 1 & 2 (Matrix Spike)
Prep Type: Total/NA
Prep Batch: 459748

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C10-C28	<26	*1	1660	1610		ug/L		97	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
n-Octacosane (Surr)	115		60 - 130

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

Job ID: 380-103360-1

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

Lab Sample ID: 380-103360-3 MSD — **Client Sample ID: HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate)**
Matrix: Drinking Water — **Prep Type: Total/NA**
Analysis Batch: 462177 — **Prep Batch: 459748**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	*1	1620	1500		ug/L		93	70 - 130	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
n-Octacosane (Surr)	*109*		*60 - 130*

GC/MS Semi VOA

Prep Batch: 98718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	525.2	
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	
MB 380-98718/21-A	Method Blank	Total/NA	Water	525.2	
LCS 380-98718/23-A	Lab Control Sample	Total/NA	Water	525.2	
LCSD 380-98718/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	
MRL 380-98718/22-A	Lab Control Sample	Total/NA	Water	525.2	
380-103336-J-1-A MS	Matrix Spike	Total/NA	Water	525.2	
380-103353-AY-1-A DU	Duplicate	Total/NA	Water	525.2	

Analysis Batch: 98808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	525.2	98718
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	525.2	98718
MB 380-98718/21-A	Method Blank	Total/NA	Water	525.2	98718
LCS 380-98718/23-A	Lab Control Sample	Total/NA	Water	525.2	98718
LCSD 380-98718/24-A	Lab Control Sample Dup	Total/NA	Water	525.2	98718
MRL 380-98718/22-A	Lab Control Sample	Total/NA	Water	525.2	98718
380-103336-J-1-A MS	Matrix Spike	Total/NA	Water	525.2	98718

Analysis Batch: 98990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103353-AY-1-A DU	Duplicate	Total/NA	Water	525.2	98718

Prep Batch: 460222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	625.1	
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	625.1	
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-460222/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-460222/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	Total/NA	Drinking Water	625.1	
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	Total/NA	Drinking Water	625.1	
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	Total/NA	Drinking Water	625.1	
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Dup	Total/NA	Drinking Water	625.1	

Analysis Batch: 461962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	625.1 SIM	460222
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	625.1 SIM	460222
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1 SIM	460222
LCS 570-460222/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	460222
LCSD 570-460222/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	460222
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	Total/NA	Drinking Water	625.1 SIM	460222
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	Total/NA	Drinking Water	625.1 SIM	460222
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	Total/NA	Drinking Water	625.1 SIM	460222
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Dup	Total/NA	Drinking Water	625.1 SIM	460222

Analysis Batch: 465420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	625.1	460222
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	625.1	460222

GC/MS Semi VOA (Continued)

Analysis Batch: 465420 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-460222/1-A	Method Blank	Total/NA	Water	625.1	460222

GC VOA

Analysis Batch: 460706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	8015B GRO LL	
380-103360-2	TB: MOANALUA WELLS	Total/NA	Water	8015B GRO LL	
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	8015B GRO LL	
380-103360-4	TB: HALAWA WELLS UNITS 1&2	Total/NA	Water	8015B GRO LL	
MB 570-460706/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-460706/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-460706/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-460706/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	Total/NA	Drinking Water	8015B GRO LL	
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	Total/NA	Drinking Water	8015B GRO LL	
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	Total/NA	Drinking Water	8015B GRO LL	
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Dup	Total/NA	Drinking Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 459748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	3510C	
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	3510C	
MB 570-459748/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-459748/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-459748/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-459748/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	Total/NA	Drinking Water	3510C	
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	Total/NA	Drinking Water	3510C	
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	Total/NA	Drinking Water	3510C	
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Dup	Total/NA	Drinking Water	3510C	

Analysis Batch: 462177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-103360-1	MOANALUA WELLS	Total/NA	Drinking Water	8015B	459748
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Total/NA	Drinking Water	8015B	459748
MB 570-459748/1-A	Method Blank	Total/NA	Water	8015B	459748
LCS 570-459748/2-A	Lab Control Sample	Total/NA	Water	8015B	459748
LCSD 570-459748/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	459748
MRL 570-459748/4-A	Lab Control Sample	Total/NA	Water	8015B	459748
380-103360-1 MS	MOANALUA WELLS (Matrix Spike)	Total/NA	Drinking Water	8015B	459748
380-103360-1 MSD	MOANALUA WELLS (Matrix Spike Duplicate)	Total/NA	Drinking Water	8015B	459748
380-103360-3 MS	HALAWA WELLS UNITS 1 & 2 (Matrix Spike)	Total/NA	Drinking Water	8015B	459748
380-103360-3 MSD	HALAWA WELLS UNITS 1 & 2 (Matrix Spike Dup	Total/NA	Drinking Water	8015B	459748

Lab Chronicle

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

Job ID: 380-103360-1

Client Sample ID: MOANALUA WELLS
Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-1
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			98718	OTM3	EA POM	07/12/24 09:10
Total/NA	Analysis	525.2		1	98808	Q8LA	EA POM	07/12/24 17:28
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1		1	465420	UX77	EET CAL 4	07/30/24 14:14
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1 SIM		1	461962	CG	EET CAL 4	07/19/24 14:42
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 16:30
Total/NA	Prep	3510C			459748	H6FE	EET CAL 4	07/12/24 09:30
Total/NA	Analysis	8015B		1	462177	SP9M	EET CAL 4	07/20/24 09:00

Client Sample ID: TB: MOANALUA WELLS
Date Collected: 07/08/24 10:12
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 21:00

Client Sample ID: HALAWA WELLS UNITS 1 & 2 P1
Date Collected: 07/08/24 10:39
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-3
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	525.2			98718	OTM3	EA POM	07/12/24 09:10
Total/NA	Analysis	525.2		1	98808	Q8LA	EA POM	07/12/24 17:48
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1		1	465420	UX77	EET CAL 4	07/30/24 14:37
Total/NA	Prep	625.1			460222	H1SH	EET CAL 4	07/15/24 05:12
Total/NA	Analysis	625.1 SIM		1	461962	CG	EET CAL 4	07/19/24 15:49
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 17:49
Total/NA	Prep	3510C			459748	H6FE	EET CAL 4	07/12/24 09:30
Total/NA	Analysis	8015B		1	462177	SP9M	EET CAL 4	07/20/24 10:03

Client Sample ID: TB: HALAWA WELLS UNITS 1&2
Date Collected: 07/08/24 10:39
Date Received: 07/10/24 09:55

Lab Sample ID: 380-103360-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8015B GRO LL		1	460706	A9VE	EET CAL 4	07/16/24 21:26

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: 380-103360-1

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	Drinking Water	1-Methylnaphthalene
525.2	525.2	Drinking Water	2,4'-DDD
525.2	525.2	Drinking Water	2,4'-DDE
525.2	525.2	Drinking Water	2,4'-DDT
525.2	525.2	Drinking Water	2,4-Dinitrotoluene
525.2	525.2	Drinking Water	2,6-Dinitrotoluene
525.2	525.2	Drinking Water	2-Methylnaphthalene
525.2	525.2	Drinking Water	4,4'-DDD
525.2	525.2	Drinking Water	4,4'-DDE
525 2	525 2	Drinking Water	4,4' DDT
525.2	525.2	Drinking Water	Acetochlor
525.2	525.2	Drinking Water	alpha-BHC
525.2	525.2	Drinking Water	alpha-Chlordane
525.2	525.2	Drinking Water	beta-BHC
525.2	525.2	Drinking Water	Chlorobenzilate
525.2	525.2	Drinking Water	Chloroneb
525.2	525.2	Drinking Water	Chlorothalonil (Draconil, Bravo)
525.2	525.2	Drinking Water	Chlorpyrifos
525.2	525.2	Drinking Water	delta-BHC
525.2	525.2	Drinking Water	Diclorvos (DDVP)
525.2	525.2	Drinking Water	Endosulfan I (Alpha)
525.2	525.2	Drinking Water	Endosulfan II (Beta)
525.2	525.2	Drinking Water	Endosulfan sulfate
525.2	525.2	Drinking Water	Endrin aldehyde
525.2	525.2	Drinking Water	EPTC
525.2	525.2	Drinking Water	gamma-Chlordane
525.2	525.2	Drinking Water	Isophorone
525.2	525.2	Drinking Water	Malathion
525.2	525.2	Drinking Water	Parathion
525.2	525.2	Drinking Water	Pendimethalin (Penoxaline)
525.2	525.2	Drinking Water	Terbacil
525.2	525.2	Drinking Water	Terbuthylazine
525.2	525.2	Drinking Water	Total Permethrin (mixed isomers)
525.2	525.2	Drinking Water	trans-Nonachlor

Laboratory: Eurofins Calscience

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

Authority	Program	Identification Number	Expiration Date
Arizona	State	AZ0830	11-16-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	07-31-24
Nevada	State	CA00111	07-31-24

Accreditation/Certification Summary

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

Job ID: 380-103360-1

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
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

Method Summary

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

Job ID: 380-103360-1

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: 380-103360-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	PWSID Number
380-103360-1	MOANALUA WELLS	Drinking Water	07/08/24 10:12	07/10/24 09:55	HI0000331
380-103360-2	TB: MOANALUA WELLS	Water	07/08/24 10:12	07/10/24 09:55	
380-103360-3	HALAWA WELLS UNITS 1 & 2 P1	Drinking Water	07/08/24 10:39	07/10/24 09:55	
380-103360-4	TB: HALAWA WELLS UNITS 1&2	Water	07/08/24 10:39	07/10/24 09:55	

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	Lab PM	Carrier Tracking No(s)	COC No
	02,04	Arada Rachelle		380-28005-2757 1
Client Contact: Dr Ron Fenstemacher	Phone: +18087485840	E-Mail: Rachelle.Arada@et.eurofinsus com	State of Origin:	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
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, 625.1_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		
Moanalua Wells	8-Jul-2024	012	G	Water		x	3	4	3	2				
Moanalua Wells (Matrix Spike)	8-Jul-2024			Water			X	X	X	X				
Moanalua Wells (Matrix Spike Duplicate)	8-Jul-2024			Water			X	X	X	X				
TB Moanalua Wells	8-Jul-2024	1012		Water				2						
Halawa Wells Units 1 & 2 P1	8-Jul-2024	1039	G	Water		x	3	4	3	2				
Halawa Wells Units 1 & 2 (Matrix Spike)	8-Jul-2024			Water			X	X	X	X				
Halawa Wells Units 1 & 2 (Matrix Spike Duplicate)	8-Jul-2024			Water			X	X	X	X				
TB Halawa Wells Units 1 & 2	8-Jul-2024	1039		Water				2						

380-103360 COC

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.

① 7773 0273 3149
② 7773 0273 3150

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

Relinquished [redacted]	Date/Time: 09/10/2024 0900	Company: HBWS	Received by: G. RETTNER	Date/Time: 09/10/2024 09:55	Company: EEAP
Relinquished by:	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: ① 4.9°-0.1°=4.8° ② 5.0°-0.1°=4.9° 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 | Enviro

Loc: 380
103360

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Arada, Rachelle	Carrier Tracking No(s):	COC No: 380-136906.1
Client Contact: Shipping/Receiving	Phone:	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 #: 380-103360-1
Address: 2841 Dow Avenue, Suite 100,	Due Date Requested: 7/30/2024	Analysis Requested		Preservation Codes:
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(Tel)	PO #:			
Email:	WO #:			
Project Name: RED-HILL	Project #: 38001111			
Site: Honolulu BWS Sites	SSOW#:			Other:

380-103360 Chain of Custody

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	625.1/625_Prep (MOD) Tentatively Identified Compounds (Hold)	625.1_SIM/625_Prep (MOD) Extended PAH List	8015B_GRO_LL/5030C (MOD) GRO	8015B_GRO_LL/5030C GRO	Total Number of contain	Special Instructions/Note:
			Preservation Code:										
MOANALUA WELLS (380-103360-1)	7/8/24	10:12 Hawaiian		Water			X	X	X	X		4	initial volume (500ml) and final volume (2ml). MRLs are needed.
MOANALUA WELLS (Matrix Spike) (380-103360-1MS)	7/8/24	10:12 Hawaiian	MS	Water			X	X	X	X		3	initial volume (500ml) and final volume (2ml). MRLs are needed.
MOANALUA WELLS (Matrix Spike Duplicate) (380-103360-1MSD	7/8/24	10:12 Hawaiian	MSD	Water			X	X	X	X		3	initial volume (500ml) and final volume (2ml). MRLs are needed.
TB: MOANALUA WELLS (380-103360-2)	7/8/24	10:12 Hawaiian		Water							X	2	MRLs are needed.
HALAWA WELLS UNITS 1 & 2 P1 (380-103360-3)	7/8/24	10:39 Hawaiian		Water			X	X	X	X		4	initial volume (500ml) and final volume (2ml). MRLs are needed.
HALAWA WELLS UNITS 1 & 2 (Matrix Spike) (380-103360-3MS)	7/8/24	10:39 Hawaiian	MS	Water			X	X	X	X		3	initial volume (500ml) and final volume (2ml). MRLs are needed.
HALAWA WELLS UNITS 1 & 2 (Matrix Spike Duplicate) (380-103	7/8/24	10:39 Hawaiian	MSD	Water			X	X	X	X		3	initial volume (500ml) and final volume (2ml). MRLs are needed.
TB: HALAWA WELLS UNITS 1&2 (380-103360-4)	7/8/24	10:39 Hawaiian		Water							X	2	MRLs are needed.

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
Relinquished by:	7/11/24 1300	ECA		7/11/24 13:00	TAL
Relinquished by:	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:
		2.5/2.5 SC12

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-103360-1

Login Number: 103360
List Number: 1
Creator: Elyas, Matthew

List Source: Eurofins Eaton Analytical Pomona

Question	Answer	Comment
The coolers custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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).	True	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-103360-1

Login Number: 103360
List Number: 2
Creator: Khana, Piyush

List Source: Eurofins Calscience
List Creation: 07/11/24 02:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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	