

ANALYTICAL REPORT

PREPARED FOR

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City & County of Honolulu
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Honolulu, Hawaii 96843

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JOB DESCRIPTION

INTERA - Red-Hill-Incident
Site J

JOB NUMBER

380-97109-1

Eurofins Eaton Analytical Pomona

Job Notes

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

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

Compliance Statement

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

Authorization



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Definitions/Glossary

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Qualifiers

GC/MS VOA

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

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased

Glossary

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

Case Narrative

Client: City & County of Honolulu
Project: INTERA - Red-Hill-Incident

Job ID: 380-97109-1

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Eurofins Eaton Analytical Pomona

Job Narrative 380-97109-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 5/23/2024 9:48 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

GC/MS VOA

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-446101. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-446831. The laboratory control sample (LCS) was performed in duplicate (LCSD) to provide precision data for this batch.

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015B_DRO_LL_CS: The method reporting limit check (MRL) for preparation batch 570-445116 and analytical batch 570-450831 recovered outside control limits for the following analytes: C10-C28. These analytes were biased high in the MRL and were not detected in the associated samples; therefore, the data have been reported.

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

Eurofins Eaton Analytical Pomona

Detection Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-97109-1

No Detections.

Client Sample ID: BWS2253-J1-TB

Lab Sample ID: 380-97109-2

No Detections.

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

This Detection Summary does not include radiochemical test results.

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-97109-1

Date Collected: 05/22/24 12:30

Matrix: Drinking Water

Date Received: 05/23/24 09:48

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<2.0		2.0	ug/L			05/31/24 11:30	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			05/31/24 11:30	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,1-Dichloroethane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,1-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,1-Dichloropropene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			05/31/24 11:30	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			05/31/24 11:30	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,2-Dichloroethane	<0.50		0.50	ug/L			05/31/24 11:30	1
1,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
1,3-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:30	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
2,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:30	1
2-Butanone	<10		10	ug/L			05/31/24 11:30	1
2-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 11:30	1
2-Hexanone	<10		10	ug/L			05/31/24 11:30	1
4-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 11:30	1
Acetone	<10		10	ug/L			05/31/24 11:30	1
Benzene	<0.50		0.50	ug/L			05/31/24 11:30	1
Bromobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
Bromochloromethane	<2.0		2.0	ug/L			05/31/24 11:30	1
Bromodichloromethane	<1.0		1.0	ug/L			05/31/24 11:30	1
Bromoform	<5.0		5.0	ug/L			05/31/24 11:30	1
Bromomethane	<25		25	ug/L			05/31/24 11:30	1
Carbon disulfide	<10		10	ug/L			05/31/24 11:30	1
Carbon tetrachloride	<0.50		0.50	ug/L			05/31/24 11:30	1
Chlorobenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
Chloroethane	<5.0		5.0	ug/L			05/31/24 11:30	1
Chloroform	<1.0		1.0	ug/L			05/31/24 11:30	1
Chloromethane	<10		10	ug/L			05/31/24 11:30	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:30	1
cis-1,3-Dichloropropane	<0.50		0.50	ug/L			05/31/24 11:30	1
Dibromochloromethane	<2.0		2.0	ug/L			05/31/24 11:30	1
Dibromomethane	<1.0		1.0	ug/L			05/31/24 11:30	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			05/31/24 11:30	1
Diethyl ether	<10		10	ug/L			05/31/24 11:30	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			05/31/24 11:30	1
Ethanol	<100		100	ug/L			05/31/24 11:30	1
Ethylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
Ethylene Dibromide	<1.0		1.0	ug/L			05/31/24 11:30	1
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			05/31/24 11:30	1

Client Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-97109-1

Date Collected: 05/22/24 12:30

Matrix: Drinking Water

Date Received: 05/23/24 09:48

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<10		10	ug/L			05/31/24 11:30	1
Hexane	<5.0		5.0	ug/L			05/31/24 11:30	1
Isobutyl alcohol	<75		75	ug/L			05/31/24 11:30	1
Isopropanol	<75		75	ug/L			05/31/24 11:30	1
Isopropylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
m,p-Xylene	<2.0		2.0	ug/L			05/31/24 11:30	1
Methylene Chloride	<10		10	ug/L			05/31/24 11:30	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			05/31/24 11:30	1
MIBK	<10		10	ug/L			05/31/24 11:30	1
Naphthalene	<10		10	ug/L			05/31/24 11:30	1
n-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
N-Propylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
o-Xylene	<1.0		1.0	ug/L			05/31/24 11:30	1
p-Isopropyltoluene	<1.0		1.0	ug/L			05/31/24 11:30	1
sec-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
Styrene	<1.0		1.0	ug/L			05/31/24 11:30	1
tert-Amyl alcohol	<50		50	ug/L			05/31/24 11:30	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			05/31/24 11:30	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			05/31/24 11:30	1
tert-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:30	1
Tetrachloroethene	<1.0		1.0	ug/L			05/31/24 11:30	1
Toluene	<1.0		1.0	ug/L			05/31/24 11:30	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:30	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			05/31/24 11:30	1
Trichloroethene	<1.0		1.0	ug/L			05/31/24 11:30	1
Trichlorofluoromethane	<10		10	ug/L			05/31/24 11:30	1
Vinyl acetate	<10		10	ug/L			05/31/24 11:30	1
Vinyl chloride	<0.50		0.50	ug/L			05/31/24 11:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 123		05/31/24 11:30	1
4-Bromofluorobenzene (Surr)	91		80 - 120		05/31/24 11:30	1
Dibromofluoromethane (Surr)	105		78 - 120		05/31/24 11:30	1
Toluene-d8 (Surr)	100		80 - 120		05/31/24 11:30	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			06/01/24 00:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		38 - 134		06/01/24 00:27	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		05/28/24 20:24	06/14/24 14:26	1
Motor Oil Range Organics [C24-C36]	<26		26	ug/L		05/28/24 20:24	06/14/24 14:26	1
C8-C18	<26		26	ug/L		05/28/24 20:24	06/14/24 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
n-Octacosane (Surr)	102		60 - 130		05/28/24 20:24	06/14/24 14:26	1

Eurofins Eaton Analytical Pomona

Client Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Client Sample ID: BWS2253-J1-TB

Lab Sample ID: 380-97109-2

Date Collected: 05/22/24 12:30

Matrix: Drinking Water

Date Received: 05/23/24 09:48

Method: SW846 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<2.0		2.0	ug/L			05/31/24 11:08	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			05/31/24 11:08	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,1-Dichloroethane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,1-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,1-Dichloropropene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			05/31/24 11:08	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			05/31/24 11:08	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,2-Dichloroethane	<0.50		0.50	ug/L			05/31/24 11:08	1
1,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
1,3-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:08	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
2,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 11:08	1
2-Butanone	<10		10	ug/L			05/31/24 11:08	1
2-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 11:08	1
2-Hexanone	<10		10	ug/L			05/31/24 11:08	1
4-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 11:08	1
Acetone	<10		10	ug/L			05/31/24 11:08	1
Benzene	<0.50		0.50	ug/L			05/31/24 11:08	1
Bromobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
Bromochloromethane	<2.0		2.0	ug/L			05/31/24 11:08	1
Bromodichloromethane	<1.0		1.0	ug/L			05/31/24 11:08	1
Bromoform	<5.0		5.0	ug/L			05/31/24 11:08	1
Bromomethane	<25		25	ug/L			05/31/24 11:08	1
Carbon disulfide	<10		10	ug/L			05/31/24 11:08	1
Carbon tetrachloride	<0.50		0.50	ug/L			05/31/24 11:08	1
Chlorobenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
Chloroethane	<5.0		5.0	ug/L			05/31/24 11:08	1
Chloroform	<1.0		1.0	ug/L			05/31/24 11:08	1
Chloromethane	<10		10	ug/L			05/31/24 11:08	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:08	1
cis-1,3-Dichloropropane	<0.50		0.50	ug/L			05/31/24 11:08	1
Dibromochloromethane	<2.0		2.0	ug/L			05/31/24 11:08	1
Dibromomethane	<1.0		1.0	ug/L			05/31/24 11:08	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			05/31/24 11:08	1
Diethyl ether	<10		10	ug/L			05/31/24 11:08	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			05/31/24 11:08	1
Ethanol	<100		100	ug/L			05/31/24 11:08	1
Ethylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
Ethylene Dibromide	<1.0		1.0	ug/L			05/31/24 11:08	1
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			05/31/24 11:08	1

Client Sample Results

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

Client Sample ID: BWS2253-J1-TB

Lab Sample ID: 380-97109-2

Date Collected: 05/22/24 12:30

Matrix: Drinking Water

Date Received: 05/23/24 09:48

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<10		10	ug/L			05/31/24 11:08	1
Hexane	<5.0		5.0	ug/L			05/31/24 11:08	1
Isobutyl alcohol	<75		75	ug/L			05/31/24 11:08	1
Isopropanol	<75		75	ug/L			05/31/24 11:08	1
Isopropylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
m,p-Xylene	<2.0		2.0	ug/L			05/31/24 11:08	1
Methylene Chloride	<10		10	ug/L			05/31/24 11:08	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			05/31/24 11:08	1
MIBK	<10		10	ug/L			05/31/24 11:08	1
Naphthalene	<10		10	ug/L			05/31/24 11:08	1
n-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
N-Propylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
o-Xylene	<1.0		1.0	ug/L			05/31/24 11:08	1
p-Isopropyltoluene	<1.0		1.0	ug/L			05/31/24 11:08	1
sec-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
Styrene	<1.0		1.0	ug/L			05/31/24 11:08	1
tert-Amyl alcohol	<50		50	ug/L			05/31/24 11:08	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			05/31/24 11:08	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			05/31/24 11:08	1
tert-Butylbenzene	<1.0		1.0	ug/L			05/31/24 11:08	1
Toluene	<1.0		1.0	ug/L			05/31/24 11:08	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 11:08	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			05/31/24 11:08	1
Trichloroethene	<1.0		1.0	ug/L			05/31/24 11:08	1
Trichlorofluoromethane	<10		10	ug/L			05/31/24 11:08	1
Vinyl acetate	<10		10	ug/L			05/31/24 11:08	1
Vinyl chloride	<0.50		0.50	ug/L			05/31/24 11:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 123		05/31/24 11:08	1
4-Bromofluorobenzene (Surr)	92		80 - 120		05/31/24 11:08	1
Dibromofluoromethane (Surr)	105		78 - 120		05/31/24 11:08	1
Toluene-d8 (Surr)	100		80 - 120		05/31/24 11:08	1

Method: SW846 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<1.0		1.0	ug/L			06/03/24 11:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 123		06/03/24 11:11	1
4-Bromofluorobenzene (Surr)	97		80 - 120		06/03/24 11:11	1
Dibromofluoromethane (Surr)	101		78 - 120		06/03/24 11:11	1
Toluene-d8 (Surr)	100		80 - 120		06/03/24 11:11	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			05/31/24 23:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		38 - 134		05/31/24 23:39	1

Eurofins Eaton Analytical Pomona

Action Limit Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-97109-1

Compliance Check

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

Analyte	Result	Qualifier	Unit	EPAMCL Limit	HI Org Limit	RL	Method	Prep Type
1,1,1-Trichloroethane	<1.0		ug/L	200	200.0	1.0	8260B	Total/NA
1,1,2-Trichloroethane	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
1,1-Dichloroethene	<1.0		ug/L	7	7.000	1.0	8260B	Total/NA
1,2,3-Trichloropropane	<5.0		ug/L		0.6000	5.0	8260B	Total/NA
1,2,4-Trichlorobenzene	<1.0		ug/L	70	70.00	1.0	8260B	Total/NA
1,2-Dibromo-3-Chloropropane	<10		ug/L	0.2		10	8260B	Total/NA
1,2-Dichlorobenzene	<1.0		ug/L	600	600.0	1.0	8260B	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
1,2-Dichloropropane	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
1,4-Dichlorobenzene	<1.0		ug/L	75	75.000	1.0	8260B	Total/NA
Benzene	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
Carbon tetrachloride	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
Chlorobenzene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
cis-1,2-Dichloroethene	<1.0		ug/L	70	70.00	1.0	8260B	Total/NA
Ethylbenzene	<1.0		ug/L	700	700.0	1.0	8260B	Total/NA
Ethylene Dibromide	<1.0		ug/L	0.05		1.0	8260B	Total/NA
Methylene Chloride	<10		ug/L	5	5.000	10	8260B	Total/NA
Styrene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
Tetrachloroethene	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
Toluene	<1.0		ug/L	1000	1000	1.0	8260B	Total/NA
trans-1,2-Dichloroethene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
Trichloroethene	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
Vinyl chloride	<0.50		ug/L	2	2.000	0.50	8260B	Total/NA

Client Sample ID: BWS2253-J1-TB

Lab Sample ID: 380-97109-2

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	HI Org Limit	RL	Method	Prep Type
1,1,1-Trichloroethane	<1.0		ug/L	200	200.0	1.0	8260B	Total/NA
1,1,2-Trichloroethane	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
1,1-Dichloroethene	<1.0		ug/L	7	7.000	1.0	8260B	Total/NA
1,2,3-Trichloropropane	<5.0		ug/L		0.6000	5.0	8260B	Total/NA
1,2,4-Trichlorobenzene	<1.0		ug/L	70	70.00	1.0	8260B	Total/NA
1,2-Dibromo-3-Chloropropane	<10		ug/L	0.2		10	8260B	Total/NA
1,2-Dichlorobenzene	<1.0		ug/L	600	600.0	1.0	8260B	Total/NA
1,2-Dichloroethane	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
1,2-Dichloropropane	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
1,4-Dichlorobenzene	<1.0		ug/L	75	75.000	1.0	8260B	Total/NA
Benzene	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
Carbon tetrachloride	<0.50		ug/L	5	5.000	0.50	8260B	Total/NA
Chlorobenzene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
cis-1,2-Dichloroethene	<1.0		ug/L	70	70.00	1.0	8260B	Total/NA
Ethylbenzene	<1.0		ug/L	700	700.0	1.0	8260B	Total/NA
Ethylene Dibromide	<1.0		ug/L	0.05		1.0	8260B	Total/NA

Eurofins Eaton Analytical Pomona

Action Limit Summary

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Client Sample ID: BWS2253-J1-TB (Continued)

Lab Sample ID: 380-97109-2

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	HI Org Limit	RL	Method	Prep Type
Methylene Chloride	<10		ug/L	5	5.000	10	8260B	Total/NA
Styrene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
Toluene	<1.0		ug/L	1000	1000	1.0	8260B	Total/NA
trans-1,2-Dichloroethene	<1.0		ug/L	100	100.0	1.0	8260B	Total/NA
Trichloroethene	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA
Vinyl chloride	<0.50		ug/L	2	2.000	0.50	8260B	Total/NA
Tetrachloroethene - RA	<1.0		ug/L	5	5.000	1.0	8260B	Total/NA



Surrogate Summary

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
380-97109-1	BWS2253-J1-AQ	99	91	105	100
380-97109-2	BWS2253-J1-TB	99	92	105	100
380-97109-2 - RA	BWS2253-J1-TB	101	97	101	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-123)	BFB (80-120)	DBFM (78-120)	TOL (80-120)
LCS 570-446101/1003	Lab Control Sample	101	94	105	101
LCS 570-446831/1003	Lab Control Sample	103	97	100	100
LCSD 570-446101/4	Lab Control Sample Dup	104	94	106	102
LCSD 570-446831/4	Lab Control Sample Dup	103	98	100	100
MB 570-446101/7	Method Blank	100	93	104	100
MB 570-446831/7	Method Blank	99	97	100	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(38-134)
380-97109-1	BWS2253-J1-AQ	75
380-97109-2	BWS2253-J1-TB	70

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1
		(38-134)
380-97122-A-1 MS	Matrix Spike	80
380-97122-A-1 MSD	Matrix Spike Duplicate	76
LCS 570-446273/4	Lab Control Sample	77
LCSD 570-446273/7	Lab Control Sample Dup	75
MB 570-446273/6	Method Blank	71

Surrogate Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (38-134)
MRL 570-446273/3	Lab Control Sample	72

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

Matrix: Drinking Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-97109-1	BWS2253-J1-AQ	102

Surrogate Legend

OTCSN = n-Octacosane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	OTCSN1 (60-130)
380-97122-C-1-A MS	Matrix Spike	120
380-97122-C-1-B MSD	Matrix Spike Duplicate	116
LCS 570-445116/2-A	Lab Control Sample	126
LCSD 570-445116/3-A	Lab Control Sample Dup	107
MB 570-445116/1-A	Method Blank	119
MRL 570-445116/4-A	Lab Control Sample	84

Surrogate Legend

OTCSN = n-Octacosane (Surr)

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 570-446101/7
Matrix: Water
Analysis Batch: 446101

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<2.0		2.0	ug/L			05/31/24 08:53	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			05/31/24 08:53	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,1-Dichloroethane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,1-Dichloroethene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,1-Dichloropropene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			05/31/24 08:53	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			05/31/24 08:53	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,2-Dichloroethane	<0.50		0.50	ug/L			05/31/24 08:53	1
1,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
1,3-Dichloropropane	<1.0		1.0	ug/L			05/31/24 08:53	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
2,2-Dichloropropane	<1.0		1.0	ug/L			05/31/24 08:53	1
2-Butanone	<10		10	ug/L			05/31/24 08:53	1
2-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 08:53	1
2-Hexanone	<10		10	ug/L			05/31/24 08:53	1
4-Chlorotoluene	<1.0		1.0	ug/L			05/31/24 08:53	1
Acetone	<10		10	ug/L			05/31/24 08:53	1
Benzene	<0.50		0.50	ug/L			05/31/24 08:53	1
Bromobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
Bromochloromethane	<2.0		2.0	ug/L			05/31/24 08:53	1
Bromodichloromethane	<1.0		1.0	ug/L			05/31/24 08:53	1
Bromoform	<5.0		5.0	ug/L			05/31/24 08:53	1
Bromomethane	<25		25	ug/L			05/31/24 08:53	1
Carbon disulfide	<10		10	ug/L			05/31/24 08:53	1
Carbon tetrachloride	<0.50		0.50	ug/L			05/31/24 08:53	1
Chlorobenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
Chloroethane	<5.0		5.0	ug/L			05/31/24 08:53	1
Chloroform	<1.0		1.0	ug/L			05/31/24 08:53	1
Chloromethane	<10		10	ug/L			05/31/24 08:53	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 08:53	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			05/31/24 08:53	1
Dibromochloromethane	<2.0		2.0	ug/L			05/31/24 08:53	1
Dibromomethane	<1.0		1.0	ug/L			05/31/24 08:53	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			05/31/24 08:53	1
Diethyl ether	<10		10	ug/L			05/31/24 08:53	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			05/31/24 08:53	1
Ethanol	<100		100	ug/L			05/31/24 08:53	1
Ethylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
Ethylene Dibromide	<1.0		1.0	ug/L			05/31/24 08:53	1

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QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-446101/7
Matrix: Water
Analysis Batch: 446101

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			05/31/24 08:53	1
Hexachloro-1,3-butadiene	<10		10	ug/L			05/31/24 08:53	1
Hexane	<5.0		5.0	ug/L			05/31/24 08:53	1
Isobutyl alcohol	<75		75	ug/L			05/31/24 08:53	1
Isopropanol	<75		75	ug/L			05/31/24 08:53	1
Isopropylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
m,p-Xylene	<2.0		2.0	ug/L			05/31/24 08:53	1
Methylene Chloride	<10		10	ug/L			05/31/24 08:53	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			05/31/24 08:53	1
MIBK	<10		10	ug/L			05/31/24 08:53	1
Naphthalene	<10		10	ug/L			05/31/24 08:53	1
n-Butylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
N-Propylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
o-Xylene	<1.0		1.0	ug/L			05/31/24 08:53	1
p-Isopropyltoluene	<1.0		1.0	ug/L			05/31/24 08:53	1
sec-Butylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
Styrene	<1.0		1.0	ug/L			05/31/24 08:53	1
tert-Amyl alcohol	<50		50	ug/L			05/31/24 08:53	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			05/31/24 08:53	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			05/31/24 08:53	1
tert-Butylbenzene	<1.0		1.0	ug/L			05/31/24 08:53	1
Tetrachloroethene	<1.0		1.0	ug/L			05/31/24 08:53	1
Toluene	<1.0		1.0	ug/L			05/31/24 08:53	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			05/31/24 08:53	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			05/31/24 08:53	1
Trichloroethene	<1.0		1.0	ug/L			05/31/24 08:53	1
Trichlorofluoromethane	<10		10	ug/L			05/31/24 08:53	1
Vinyl acetate	<10		10	ug/L			05/31/24 08:53	1
Vinyl chloride	<0.50		0.50	ug/L			05/31/24 08:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 123		05/31/24 08:53	1
4-Bromofluorobenzene (Surr)	93		80 - 120		05/31/24 08:53	1
Dibromofluoromethane (Surr)	104		78 - 120		05/31/24 08:53	1
Toluene-d8 (Surr)	100		80 - 120		05/31/24 08:53	1

Lab Sample ID: LCS 570-446101/1003
Matrix: Water
Analysis Batch: 446101

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	18.5		ug/L		92	80 - 122
1,1,1-Trichloroethane	20.0	19.7		ug/L		98	78 - 125
1,1,1,2,2-Tetrachloroethane	20.0	20.8		ug/L		104	79 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.4		ug/L		117	72 - 138
1,1,2-Trichloroethane	20.0	20.3		ug/L		101	80 - 124
1,1-Dichloroethane	20.0	21.0		ug/L		105	80 - 127
1,1-Dichloroethene	20.0	22.7		ug/L		113	80 - 133

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-446101/1003
Matrix: Water
Analysis Batch: 446101

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	20.0	22.1		ug/L		110	79 - 126
1,2,3-Trichlorobenzene	20.0	19.3		ug/L		96	79 - 128
1,2,3-Trichloropropane	20.0	18.9		ug/L		94	71 - 128
1,2,4-Trichlorobenzene	20.0	19.5		ug/L		98	77 - 126
1,2,4-Trimethylbenzene	20.0	20.3		ug/L		101	80 - 121
1,2-Dibromo-3-Chloropropane	20.0	18.0		ug/L		90	66 - 122
1,2-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 121
1,2-Dichloroethane	20.0	18.7		ug/L		93	77 - 122
1,2-Dichloropropane	20.0	20.4		ug/L		102	80 - 122
1,3,5-Trimethylbenzene	20.0	19.6		ug/L		98	80 - 123
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,3-Dichloropropane	20.0	19.8		ug/L		99	80 - 121
1,4-Dichlorobenzene	20.0	19.9		ug/L		99	80 - 120
2,2-Dichloropropane	20.0	21.4		ug/L		107	68 - 143
2-Butanone	20.0	21.4		ug/L		107	61 - 139
2-Chlorotoluene	20.0	19.1		ug/L		95	80 - 121
2-Hexanone	20.0	17.1		ug/L		86	63 - 134
4-Chlorotoluene	20.0	19.9		ug/L		99	80 - 121
Acetone	20.0	19.0		ug/L		95	45 - 150
Benzene	20.0	19.8		ug/L		99	80 - 121
Bromobenzene	20.0	19.2		ug/L		96	80 - 120
Bromochloromethane	20.0	21.6		ug/L		108	80 - 121
Bromodichloromethane	20.0	19.4		ug/L		97	80 - 121
Bromoform	20.0	17.7		ug/L		89	78 - 124
Bromomethane	20.0	24.9	J	ug/L		125	48 - 156
Carbon disulfide	20.0	21.1		ug/L		105	76 - 129
Carbon tetrachloride	20.0	18.5		ug/L		92	71 - 137
Chlorobenzene	20.0	19.3		ug/L		97	80 - 120
Chloroethane	20.0	20.6		ug/L		103	73 - 138
Chloroform	20.0	20.5		ug/L		102	80 - 121
Chloromethane	20.0	21.1		ug/L		106	57 - 138
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	80 - 125
cis-1,3-Dichloropropene	20.0	19.9		ug/L		100	80 - 120
Dibromochloromethane	20.0	18.1		ug/L		91	80 - 126
Dibromomethane	20.0	20.7		ug/L		104	80 - 120
Dichlorodifluoromethane	20.0	19.0		ug/L		95	44 - 148
Diethyl ether	20.0	22.0		ug/L		110	71 - 132
Di-isopropyl ether (DIPE)	20.0	20.9		ug/L		104	75 - 134
Ethanol	200	190		ug/L		95	50 - 168
Ethylbenzene	20.0	19.6		ug/L		98	80 - 121
Ethylene Dibromide	20.0	19.7		ug/L		99	80 - 120
Ethyl-t-butyl ether (ETBE)	20.0	19.1		ug/L		95	80 - 124
Isopropylbenzene	20.0	19.5		ug/L		98	80 - 121
m,p-Xylene	40.0	38.4		ug/L		96	80 - 123
Methylene Chloride	20.0	21.8		ug/L		109	80 - 121
Methyl-t-Butyl Ether (MTBE)	20.0	20.2		ug/L		101	78 - 123
MIBK	20.0	18.4		ug/L		92	67 - 125
Naphthalene	20.0	17.4		ug/L		87	65 - 133
n-Butylbenzene	20.0	21.4		ug/L		107	80 - 125

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-446101/1003
Matrix: Water
Analysis Batch: 446101

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
N-Propylbenzene	20.0	19.8		ug/L		99	80 - 125
o-Xylene	20.0	19.5		ug/L		98	80 - 122
p-Isopropyltoluene	20.0	21.0		ug/L		105	80 - 124
sec-Butylbenzene	20.0	20.7		ug/L		103	80 - 122
Styrene	20.0	19.5		ug/L		97	80 - 120
tert-Amyl alcohol	100	79.1		ug/L		79	51 - 148
Tert-amyl-methyl ether (TAME)	20.0	18.1		ug/L		90	74 - 125
tert-Butyl alcohol (TBA)	100	95.3		ug/L		95	70 - 141
tert-Butylbenzene	20.0	20.3		ug/L		102	80 - 122
Tetrachloroethene	20.0	19.1		ug/L		95	80 - 122
Toluene	20.0	20.3		ug/L		102	80 - 120
trans-1,2-Dichloroethene	20.0	22.0		ug/L		110	80 - 122
trans-1,3-Dichloropropene	20.0	18.9		ug/L		94	80 - 125
Trichloroethene	20.0	20.4		ug/L		102	80 - 120
Trichlorofluoromethane	20.0	22.3		ug/L		112	67 - 142
Vinyl acetate	20.0	21.1		ug/L		106	62 - 140
Vinyl chloride	20.0	22.3		ug/L		111	66 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		70 - 123
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	105		78 - 120
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: LCSD 570-446101/4
Matrix: Water
Analysis Batch: 446101

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
1,1,1,2-Tetrachloroethane	20.0	18.9		ug/L		95	80 - 122	3	20
1,1,1-Trichloroethane	20.0	19.6		ug/L		98	78 - 125	0	20
1,1,2,2-Tetrachloroethane	20.0	21.0		ug/L		105	79 - 127	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.3		ug/L		111	72 - 138	5	20
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	80 - 124	3	20
1,1-Dichloroethane	20.0	21.0		ug/L		105	80 - 127	0	20
1,1-Dichloroethene	20.0	22.4		ug/L		112	80 - 133	1	20
1,1-Dichloropropene	20.0	21.3		ug/L		106	79 - 126	4	20
1,2,3-Trichlorobenzene	20.0	19.6		ug/L		98	79 - 128	2	20
1,2,3-Trichloropropane	20.0	19.4		ug/L		97	71 - 128	3	20
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	77 - 126	1	20
1,2,4-Trimethylbenzene	20.0	20.4		ug/L		102	80 - 121	0	20
1,2-Dibromo-3-Chloropropane	20.0	18.4		ug/L		92	66 - 122	2	20
1,2-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 121	3	20
1,2-Dichloroethane	20.0	18.8		ug/L		94	77 - 122	1	20
1,2-Dichloropropane	20.0	20.3		ug/L		102	80 - 122	0	20
1,3,5-Trimethylbenzene	20.0	19.3		ug/L		96	80 - 123	1	20
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120	0	20
1,3-Dichloropropane	20.0	20.1		ug/L		100	80 - 121	1	20

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QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-446101/4
Matrix: Water
Analysis Batch: 446101

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
1,4-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120	3	20
2,2-Dichloropropane	20.0	20.6		ug/L		103	68 - 143	4	20
2-Butanone	20.0	22.7		ug/L		113	61 - 139	6	25
2-Chlorotoluene	20.0	19.0		ug/L		95	80 - 121	0	20
2-Hexanone	20.0	18.8		ug/L		94	63 - 134	9	21
4-Chlorotoluene	20.0	19.9		ug/L		99	80 - 121	0	20
Acetone	20.0	22.1		ug/L		110	45 - 150	15	23
Benzene	20.0	19.6		ug/L		98	80 - 121	1	20
Bromobenzene	20.0	19.1		ug/L		95	80 - 120	1	20
Bromochloromethane	20.0	21.3		ug/L		107	80 - 121	1	20
Bromodichloromethane	20.0	19.7		ug/L		99	80 - 121	2	20
Bromoform	20.0	18.2		ug/L		91	78 - 124	3	20
Bromomethane	20.0	24.5	J	ug/L		123	48 - 156	1	21
Carbon disulfide	20.0	21.1		ug/L		105	76 - 129	0	20
Carbon tetrachloride	20.0	17.9		ug/L		89	71 - 137	3	20
Chlorobenzene	20.0	19.5		ug/L		97	80 - 120	1	20
Chloroethane	20.0	20.1		ug/L		100	73 - 138	3	20
Chloroform	20.0	20.5		ug/L		103	80 - 121	0	20
Chloromethane	20.0	21.3		ug/L		106	57 - 138	1	20
cis-1,2-Dichloroethene	20.0	21.0		ug/L		105	80 - 125	0	20
cis-1,3-Dichloropropene	20.0	20.1		ug/L		101	80 - 120	1	20
Dibromochloromethane	20.0	18.8		ug/L		94	80 - 126	4	20
Dibromomethane	20.0	21.1		ug/L		105	80 - 120	2	20
Dichlorodifluoromethane	20.0	18.3		ug/L		92	44 - 148	3	28
Diethyl ether	20.0	22.4		ug/L		112	71 - 132	2	20
Di-isopropyl ether (DIPE)	20.0	21.2		ug/L		106	75 - 134	1	20
Ethanol	200	198		ug/L		99	50 - 168	4	29
Ethylbenzene	20.0	19.6		ug/L		98	80 - 121	0	20
Ethylene Dibromide	20.0	19.6		ug/L		98	80 - 120	0	20
Ethyl-t-butyl ether (ETBE)	20.0	19.2		ug/L		96	80 - 124	1	20
Isopropylbenzene	20.0	19.4		ug/L		97	80 - 121	1	20
m,p-Xylene	40.0	37.9		ug/L		95	80 - 123	1	20
Methylene Chloride	20.0	21.3		ug/L		106	80 - 121	2	20
Methyl-t-Butyl Ether (MTBE)	20.0	20.7		ug/L		103	78 - 123	2	20
MIBK	20.0	19.6		ug/L		98	67 - 125	6	20
Naphthalene	20.0	17.8		ug/L		89	65 - 133	2	20
n-Butylbenzene	20.0	21.4		ug/L		107	80 - 125	0	20
N-Propylbenzene	20.0	19.7		ug/L		98	80 - 125	1	20
o-Xylene	20.0	19.6		ug/L		98	80 - 122	1	20
p-Isopropyltoluene	20.0	20.9		ug/L		105	80 - 124	0	20
sec-Butylbenzene	20.0	20.9		ug/L		104	80 - 122	1	20
Styrene	20.0	19.5		ug/L		98	80 - 120	0	20
tert-Amyl alcohol	100	86.1		ug/L		86	51 - 148	8	29
Tert-amyl-methyl ether (TAME)	20.0	18.4		ug/L		92	74 - 125	2	20
tert-Butyl alcohol (TBA)	100	98.5		ug/L		99	70 - 141	3	20
tert-Butylbenzene	20.0	20.3		ug/L		102	80 - 122	0	20
Tetrachloroethene	20.0	18.7		ug/L		94	80 - 122	2	20
Toluene	20.0	20.1		ug/L		101	80 - 120	1	20
trans-1,2-Dichloroethene	20.0	21.8		ug/L		109	80 - 122	1	20

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QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-446101/4
Matrix: Water
Analysis Batch: 446101

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
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	80 - 125	2	20
Trichloroethene	20.0	20.3		ug/L		101	80 - 120	1	20
Trichlorofluoromethane	20.0	21.8		ug/L		109	67 - 142	2	20
Vinyl acetate	20.0	21.3		ug/L		107	62 - 140	1	21
Vinyl chloride	20.0	21.3		ug/L		107	66 - 136	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	104		70 - 123
4-Bromofluorobenzene (Surr)	94		80 - 120
Dibromofluoromethane (Surr)	106		78 - 120
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: MB 570-446831/7
Matrix: Water
Analysis Batch: 446831

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<2.0		2.0	ug/L			06/03/24 09:19	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			06/03/24 09:19	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,1-Dichloroethane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,1-Dichloroethene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,1-Dichloropropene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			06/03/24 09:19	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			06/03/24 09:19	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,2-Dichloroethane	<0.50		0.50	ug/L			06/03/24 09:19	1
1,2-Dichloropropane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
1,3-Dichloropropane	<1.0		1.0	ug/L			06/03/24 09:19	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
2,2-Dichloropropane	<1.0		1.0	ug/L			06/03/24 09:19	1
2-Butanone	<10		10	ug/L			06/03/24 09:19	1
2-Chlorotoluene	<1.0		1.0	ug/L			06/03/24 09:19	1
2-Hexanone	<10		10	ug/L			06/03/24 09:19	1
4-Chlorotoluene	<1.0		1.0	ug/L			06/03/24 09:19	1
Acetone	<10		10	ug/L			06/03/24 09:19	1
Benzene	<0.50		0.50	ug/L			06/03/24 09:19	1
Bromobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
Bromochloromethane	<2.0		2.0	ug/L			06/03/24 09:19	1
Bromodichloromethane	<1.0		1.0	ug/L			06/03/24 09:19	1
Bromoform	<5.0		5.0	ug/L			06/03/24 09:19	1

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QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-446831/7
Matrix: Water
Analysis Batch: 446831

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	<25		25	ug/L			06/03/24 09:19	1
Carbon disulfide	<10		10	ug/L			06/03/24 09:19	1
Carbon tetrachloride	<0.50		0.50	ug/L			06/03/24 09:19	1
Chlorobenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
Chloroethane	<5.0		5.0	ug/L			06/03/24 09:19	1
Chloroform	<1.0		1.0	ug/L			06/03/24 09:19	1
Chloromethane	<10		10	ug/L			06/03/24 09:19	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			06/03/24 09:19	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			06/03/24 09:19	1
Dibromochloromethane	<2.0		2.0	ug/L			06/03/24 09:19	1
Dibromomethane	<1.0		1.0	ug/L			06/03/24 09:19	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			06/03/24 09:19	1
Diethyl ether	<10		10	ug/L			06/03/24 09:19	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			06/03/24 09:19	1
Ethanol	<100		100	ug/L			06/03/24 09:19	1
Ethylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
Ethylene Dibromide	<1.0		1.0	ug/L			06/03/24 09:19	1
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			06/03/24 09:19	1
Hexachloro-1,3-butadiene	<10		10	ug/L			06/03/24 09:19	1
Hexane	<5.0		5.0	ug/L			06/03/24 09:19	1
Isobutyl alcohol	<75		75	ug/L			06/03/24 09:19	1
Isopropanol	<75		75	ug/L			06/03/24 09:19	1
Isopropylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
m,p-Xylene	<2.0		2.0	ug/L			06/03/24 09:19	1
Methylene Chloride	<10		10	ug/L			06/03/24 09:19	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			06/03/24 09:19	1
MIBK	<10		10	ug/L			06/03/24 09:19	1
Naphthalene	<10		10	ug/L			06/03/24 09:19	1
n-Butylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
N-Propylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
o-Xylene	<1.0		1.0	ug/L			06/03/24 09:19	1
p-Isopropyltoluene	<1.0		1.0	ug/L			06/03/24 09:19	1
sec-Butylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
Styrene	<1.0		1.0	ug/L			06/03/24 09:19	1
tert-Amyl alcohol	<50		50	ug/L			06/03/24 09:19	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			06/03/24 09:19	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			06/03/24 09:19	1
tert-Butylbenzene	<1.0		1.0	ug/L			06/03/24 09:19	1
Tetrachloroethene	<1.0		1.0	ug/L			06/03/24 09:19	1
Toluene	<1.0		1.0	ug/L			06/03/24 09:19	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			06/03/24 09:19	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			06/03/24 09:19	1
Trichloroethene	<1.0		1.0	ug/L			06/03/24 09:19	1
Trichlorofluoromethane	<10		10	ug/L			06/03/24 09:19	1
Vinyl acetate	<10		10	ug/L			06/03/24 09:19	1
Vinyl chloride	<0.50		0.50	ug/L			06/03/24 09:19	1

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 570-446831/7
Matrix: Water
Analysis Batch: 446831

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 123		06/03/24 09:19	1
4-Bromofluorobenzene (Surr)	97		80 - 120		06/03/24 09:19	1
Dibromofluoromethane (Surr)	100		78 - 120		06/03/24 09:19	1
Toluene-d8 (Surr)	100		80 - 120		06/03/24 09:19	1

Lab Sample ID: LCS 570-446831/1003
Matrix: Water
Analysis Batch: 446831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	20.0	20.0		ug/L		100	80 - 122
1,1,1-Trichloroethane	20.0	19.9		ug/L		99	78 - 125
1,1,2,2-Tetrachloroethane	20.0	20.5		ug/L		102	79 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.0		ug/L		110	72 - 138
1,1,2-Trichloroethane	20.0	20.3		ug/L		102	80 - 124
1,1-Dichloroethane	20.0	20.5		ug/L		103	80 - 127
1,1-Dichloroethene	20.0	20.9		ug/L		104	80 - 133
1,1-Dichloropropene	20.0	21.2		ug/L		106	79 - 126
1,2,3-Trichlorobenzene	20.0	19.5		ug/L		98	79 - 128
1,2,3-Trichloropropane	20.0	19.5		ug/L		98	71 - 128
1,2,4-Trichlorobenzene	20.0	19.7		ug/L		98	77 - 126
1,2,4-Trimethylbenzene	20.0	21.6		ug/L		108	80 - 121
1,2-Dibromo-3-Chloropropane	20.0	19.1		ug/L		96	66 - 122
1,2-Dichlorobenzene	20.0	21.0		ug/L		105	80 - 121
1,2-Dichloroethane	20.0	19.5		ug/L		98	77 - 122
1,2-Dichloropropane	20.0	20.7		ug/L		104	80 - 122
1,3,5-Trimethylbenzene	20.0	21.3		ug/L		106	80 - 123
1,3-Dichlorobenzene	20.0	21.4		ug/L		107	80 - 120
1,3-Dichloropropane	20.0	20.0		ug/L		100	80 - 121
1,4-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 120
2,2-Dichloropropane	20.0	19.1		ug/L		95	68 - 143
2-Butanone	20.0	21.7		ug/L		109	61 - 139
2-Chlorotoluene	20.0	20.6		ug/L		103	80 - 121
2-Hexanone	20.0	18.9		ug/L		94	63 - 134
4-Chlorotoluene	20.0	21.3		ug/L		106	80 - 121
Acetone	20.0	21.7		ug/L		109	45 - 150
Benzene	20.0	20.3		ug/L		102	80 - 121
Bromobenzene	20.0	20.6		ug/L		103	80 - 120
Bromochloromethane	20.0	20.9		ug/L		104	80 - 121
Bromodichloromethane	20.0	20.3		ug/L		102	80 - 121
Bromoform	20.0	20.7		ug/L		103	78 - 124
Bromomethane	20.0	21.7	J	ug/L		109	48 - 156
Carbon disulfide	20.0	20.1		ug/L		100	76 - 129
Carbon tetrachloride	20.0	19.3		ug/L		97	71 - 137
Chlorobenzene	20.0	20.2		ug/L		101	80 - 120
Chloroethane	20.0	19.4		ug/L		97	73 - 138
Chloroform	20.0	20.3		ug/L		101	80 - 121
Chloromethane	20.0	20.6		ug/L		103	57 - 138

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 570-446831/1003
Matrix: Water
Analysis Batch: 446831

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
cis-1,2-Dichloroethene	20.0	20.9		ug/L		104	80 - 125
cis-1,3-Dichloropropene	20.0	21.2		ug/L		106	80 - 120
Dibromochloromethane	20.0	19.8		ug/L		99	80 - 126
Dibromomethane	20.0	20.6		ug/L		103	80 - 120
Dichlorodifluoromethane	20.0	22.4		ug/L		112	44 - 148
Diethyl ether	20.0	20.8		ug/L		104	71 - 132
Di-isopropyl ether (DIPE)	20.0	20.3		ug/L		102	75 - 134
Ethanol	200	205		ug/L		102	50 - 168
Ethylbenzene	20.0	20.8		ug/L		104	80 - 121
Ethylene Dibromide	20.0	20.3		ug/L		102	80 - 120
Ethyl-t-butyl ether (ETBE)	20.0	18.5		ug/L		93	80 - 124
Isopropylbenzene	20.0	21.2		ug/L		106	80 - 121
m,p-Xylene	40.0	41.7		ug/L		104	80 - 123
Methylene Chloride	20.0	20.4		ug/L		102	80 - 121
Methyl-t-Butyl Ether (MTBE)	20.0	19.2		ug/L		96	78 - 123
MIBK	20.0	19.2		ug/L		96	67 - 125
Naphthalene	20.0	17.1		ug/L		86	65 - 133
n-Butylbenzene	20.0	22.3		ug/L		111	80 - 125
N-Propylbenzene	20.0	21.3		ug/L		106	80 - 125
o-Xylene	20.0	20.9		ug/L		105	80 - 122
p-Isopropyltoluene	20.0	21.9		ug/L		109	80 - 124
sec-Butylbenzene	20.0	21.9		ug/L		109	80 - 122
Styrene	20.0	20.9		ug/L		104	80 - 120
tert-Amyl alcohol	100	87.5		ug/L		88	51 - 148
Tert-amyl-methyl ether (TAME)	20.0	18.6		ug/L		93	74 - 125
tert-Butyl alcohol (TBA)	100	95.8		ug/L		96	70 - 141
tert-Butylbenzene	20.0	21.3		ug/L		106	80 - 122
Tetrachloroethene	20.0	21.2		ug/L		106	80 - 122
Toluene	20.0	20.9		ug/L		105	80 - 120
trans-1,2-Dichloroethene	20.0	19.9		ug/L		99	80 - 122
trans-1,3-Dichloropropene	20.0	19.8		ug/L		99	80 - 125
Trichloroethene	20.0	21.0		ug/L		105	80 - 120
Trichlorofluoromethane	20.0	22.0		ug/L		110	67 - 142
Vinyl acetate	20.0	17.1		ug/L		86	62 - 140
Vinyl chloride	20.0	22.3		ug/L		112	66 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 123
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		78 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCSD 570-446831/4
Matrix: Water
Analysis Batch: 446831

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
1,1,1,2-Tetrachloroethane	20.0	20.3		ug/L		102	80 - 122	2	20

Eurofins Eaton Analytical Pomona

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-446831/4
Matrix: Water
Analysis Batch: 446831

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
1,1,1-Trichloroethane	20.0	19.2		ug/L		96	78 - 125	3	20
1,1,2,2-Tetrachloroethane	20.0	19.5		ug/L		97	79 - 127	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.7		ug/L		98	72 - 138	11	20
1,1,2-Trichloroethane	20.0	20.1		ug/L		100	80 - 124	1	20
1,1-Dichloroethane	20.0	20.0		ug/L		100	80 - 127	2	20
1,1-Dichloroethene	20.0	19.4		ug/L		97	80 - 133	7	20
1,1-Dichloropropene	20.0	19.8		ug/L		99	79 - 126	7	20
1,2,3-Trichlorobenzene	20.0	19.4		ug/L		97	79 - 128	1	20
1,2,3-Trichloropropane	20.0	19.9		ug/L		99	71 - 128	2	20
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	77 - 126	3	20
1,2,4-Trimethylbenzene	20.0	20.1		ug/L		100	80 - 121	7	20
1,2-Dibromo-3-Chloropropane	20.0	19.6		ug/L		98	66 - 122	2	20
1,2-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 121	4	20
1,2-Dichloroethane	20.0	18.9		ug/L		95	77 - 122	3	20
1,2-Dichloropropane	20.0	19.9		ug/L		100	80 - 122	4	20
1,3,5-Trimethylbenzene	20.0	20.3		ug/L		101	80 - 123	5	20
1,3-Dichlorobenzene	20.0	19.9		ug/L		99	80 - 120	7	20
1,3-Dichloropropane	20.0	19.9		ug/L		100	80 - 121	0	20
1,4-Dichlorobenzene	20.0	19.7		ug/L		98	80 - 120	8	20
2,2-Dichloropropane	20.0	19.0		ug/L		95	68 - 143	0	20
2-Butanone	20.0	22.1		ug/L		110	61 - 139	2	25
2-Chlorotoluene	20.0	19.7		ug/L		99	80 - 121	4	20
2-Hexanone	20.0	19.6		ug/L		98	63 - 134	4	21
4-Chlorotoluene	20.0	19.7		ug/L		98	80 - 121	8	20
Acetone	20.0	22.9		ug/L		115	45 - 150	5	23
Benzene	20.0	19.4		ug/L		97	80 - 121	4	20
Bromobenzene	20.0	19.9		ug/L		99	80 - 120	4	20
Bromochloromethane	20.0	20.3		ug/L		101	80 - 121	3	20
Bromodichloromethane	20.0	20.1		ug/L		101	80 - 121	1	20
Bromoform	20.0	20.6		ug/L		103	78 - 124	0	20
Bromomethane	20.0	19.6	J	ug/L		98	48 - 156	10	21
Carbon disulfide	20.0	19.0		ug/L		95	76 - 129	5	20
Carbon tetrachloride	20.0	18.7		ug/L		94	71 - 137	3	20
Chlorobenzene	20.0	19.3		ug/L		96	80 - 120	4	20
Chloroethane	20.0	18.5		ug/L		92	73 - 138	5	20
Chloroform	20.0	19.5		ug/L		98	80 - 121	4	20
Chloromethane	20.0	19.7		ug/L		98	57 - 138	5	20
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	80 - 125	5	20
cis-1,3-Dichloropropane	20.0	20.5		ug/L		102	80 - 120	3	20
Dibromochloromethane	20.0	20.3		ug/L		102	80 - 126	3	20
Dibromomethane	20.0	20.2		ug/L		101	80 - 120	2	20
Dichlorodifluoromethane	20.0	20.8		ug/L		104	44 - 148	8	28
Diethyl ether	20.0	20.4		ug/L		102	71 - 132	2	20
Di-isopropyl ether (DIPE)	20.0	19.7		ug/L		99	75 - 134	3	20
Ethanol	200	201		ug/L		101	50 - 168	2	29
Ethylbenzene	20.0	19.8		ug/L		99	80 - 121	5	20
Ethylene Dibromide	20.0	20.5		ug/L		103	80 - 120	1	20
Ethyl-t-butyl ether (ETBE)	20.0	18.8		ug/L		94	80 - 124	1	20

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 570-446831/4
 Matrix: Water
 Analysis Batch: 446831

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
Isopropylbenzene	20.0	20.0		ug/L		100	80 - 121	6	20
m,p-Xylene	40.0	39.5		ug/L		99	80 - 123	5	20
Methylene Chloride	20.0	19.9		ug/L		100	80 - 121	3	20
Methyl-t-Butyl Ether (MTBE)	20.0	19.0		ug/L		95	78 - 123	1	20
MIBK	20.0	20.3		ug/L		102	67 - 125	6	20
Naphthalene	20.0	18.2		ug/L		91	65 - 133	6	20
n-Butylbenzene	20.0	20.8		ug/L		104	80 - 125	7	20
N-Propylbenzene	20.0	19.9		ug/L		100	80 - 125	7	20
o-Xylene	20.0	20.1		ug/L		101	80 - 122	4	20
p-Isopropyltoluene	20.0	20.6		ug/L		103	80 - 124	6	20
sec-Butylbenzene	20.0	20.4		ug/L		102	80 - 122	7	20
Styrene	20.0	20.2		ug/L		101	80 - 120	3	20
tert-Amyl alcohol	100	94.4		ug/L		94	51 - 148	8	29
Tert-amyl-methyl ether (TAME)	20.0	19.0		ug/L		95	74 - 125	2	20
tert-Butyl alcohol (TBA)	100	93.0		ug/L		93	70 - 141	3	20
tert-Butylbenzene	20.0	20.1		ug/L		100	80 - 122	6	20
Tetrachloroethene	20.0	19.7		ug/L		98	80 - 122	8	20
Toluene	20.0	20.0		ug/L		100	80 - 120	5	20
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	80 - 122	4	20
trans-1,3-Dichloropropene	20.0	19.7		ug/L		98	80 - 125	1	20
Trichloroethene	20.0	20.0		ug/L		100	80 - 120	5	20
Trichlorofluoromethane	20.0	20.2		ug/L		101	67 - 142	9	20
Vinyl acetate	20.0	16.5		ug/L		83	62 - 140	3	21
Vinyl chloride	20.0	21.1		ug/L		105	66 - 136	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	103		70 - 123
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	100		78 - 120
Toluene-d8 (Surr)	100		80 - 120

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

Lab Sample ID: MB 570-446273/6
 Matrix: Water
 Analysis Batch: 446273

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (C6-C10)	<10		10	ug/L			05/31/24 16:56	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		38 - 134		05/31/24 16:56	1

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

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

Lab Sample ID: LCS 570-446273/4
Matrix: Water
Analysis Batch: 446273

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	400	338		ug/L		84	78 - 120
Surrogate		LCS %Recovery	LCS Qualifier				Limits
4-Bromofluorobenzene (Surr)		77					38 - 134

Lab Sample ID: LCSD 570-446273/7
Matrix: Water
Analysis Batch: 446273

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	321		ug/L		80	78 - 120	5	10
Surrogate		LCSD %Recovery	LCSD Qualifier				Limits		
4-Bromofluorobenzene (Surr)		75					38 - 134		

Lab Sample ID: MRL 570-446273/3
Matrix: Water
Analysis Batch: 446273

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	9.54	J	ug/L		95	50 - 150
Surrogate		MRL %Recovery	MRL Qualifier				Limits
4-Bromofluorobenzene (Surr)		72					38 - 134

Lab Sample ID: 380-97122-A-1 MS
Matrix: Water
Analysis Batch: 446273

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (C4-C13)	<10		400	320		ug/L		80	68 - 122
Surrogate		MS %Recovery		MS Qualifier					Limits
4-Bromofluorobenzene (Surr)		80							38 - 134

Lab Sample ID: 380-97122-A-1 MSD
Matrix: Water
Analysis Batch: 446273

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (C4-C13)	<10		400	317		ug/L		79	68 - 122	1	18

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

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

Lab Sample ID: 380-97122-A-1 MSD
Matrix: Water
Analysis Batch: 446273

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	76		38 - 134

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

Lab Sample ID: MB 570-445116/1-A
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 445116

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		05/28/24 20:23	06/14/24 13:24	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		05/28/24 20:23	06/14/24 13:24	1
C8-C18	<25		25	ug/L		05/28/24 20:23	06/14/24 13:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	119		60 - 130	05/28/24 20:23	06/14/24 13:24	1

Lab Sample ID: LCS 570-445116/2-A
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 445116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	1600	1640		ug/L		102	56 - 127

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane (Surr)	126		60 - 130

Lab Sample ID: LCSD 570-445116/3-A
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 445116

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	1600	1320		ug/L		82	56 - 127	22	23

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
n-Octacosane (Surr)	107		60 - 130

Lab Sample ID: MRL 570-445116/4-A
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 445116

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	0.0200	0.0305	^3+	mg/L		152	50 - 150

Surrogate	MRL %Recovery	MRL Qualifier	Limits
n-Octacosane (Surr)	84		60 - 130

QC Sample Results

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

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

Lab Sample ID: 380-97122-C-1-A MS
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 445116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
C10-C28	<26	^3+	1690	1880		ug/L		111	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
<i>n-Octacosane (Surr)</i>	120		60 - 130						

Lab Sample ID: 380-97122-C-1-B MSD
Matrix: Water
Analysis Batch: 450831

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 445116

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	^3+	1860	2010		ug/L		108	70 - 130	7	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
<i>n-Octacosane (Surr)</i>	116		60 - 130								



QC Association Summary

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

GC/MS VOA

Analysis Batch: 446101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-97109-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8260B	
380-97109-2	BWS2253-J1-TB	Total/NA	Drinking Water	8260B	
MB 570-446101/7	Method Blank	Total/NA	Water	8260B	
LCS 570-446101/1003	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-446101/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 446831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-97109-2 - RA	BWS2253-J1-TB	Total/NA	Drinking Water	8260B	
MB 570-446831/7	Method Blank	Total/NA	Water	8260B	
LCS 570-446831/1003	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-446831/4	Lab Control Sample Dup	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 446273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-97109-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8015B GRO LL	
380-97109-2	BWS2253-J1-TB	Total/NA	Drinking Water	8015B GRO LL	
MB 570-446273/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-446273/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-446273/7	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-446273/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	
380-97122-A-1 MS	Matrix Spike	Total/NA	Water	8015B GRO LL	
380-97122-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 445116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-97109-1	BWS2253-J1-AQ	Total/NA	Drinking Water	3510C	
MB 570-445116/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-445116/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 570-445116/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-445116/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-97122-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-97122-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

Analysis Batch: 450831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-97109-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8015B	445116
MB 570-445116/1-A	Method Blank	Total/NA	Water	8015B	445116
LCS 570-445116/2-A	Lab Control Sample	Total/NA	Water	8015B	445116
LCSD 570-445116/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	445116
MRL 570-445116/4-A	Lab Control Sample	Total/NA	Water	8015B	445116
380-97122-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	445116
380-97122-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	445116

Lab Chronicle

Client: City & County of Honolulu
 Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
 SDG: Site J

Client Sample ID: BWS2253-J1-AQ
Date Collected: 05/22/24 12:30
Date Received: 05/23/24 09:48

Lab Sample ID: 380-97109-1
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	446101	AH8S	EET CAL 4	05/31/24 11:30
Total/NA	Analysis	8015B GRO LL		1	446273	A9VE	EET CAL 4	06/01/24 00:27
Total/NA	Prep	3510C			445116	TR8L	EET CAL 4	05/28/24 20:24
Total/NA	Analysis	8015B		1	450831	SP9M	EET CAL 4	06/14/24 14:26

Client Sample ID: BWS2253-J1-TB
Date Collected: 05/22/24 12:30
Date Received: 05/23/24 09:48

Lab Sample ID: 380-97109-2
Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	446101	AH8S	EET CAL 4	05/31/24 11:08
Total/NA	Analysis	8260B	RA	1	446831	U1MC	EET CAL 4	06/03/24 11:11
Total/NA	Analysis	8015B GRO LL		1	446273	A9VE	EET CAL 4	05/31/24 23:39

Laboratory References:

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: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

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
California	Los Angeles County Sanitation Districts	10109	08-01-24
California	State	3082	07-31-24
Kansas	NELAP	E-10420	08-01-24
Nevada	State	CA00111	07-31-24
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	10-11-24

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Method Summary

Client: City & County of Honolulu
Project/Site: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	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

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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: INTERA - Red-Hill-Incident

Job ID: 380-97109-1
SDG: Site J

<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
380-97109-1	BWS2253-J1-AQ	Drinking Water	05/22/24 12:30	05/23/24 09:48
380-97109-2	BWS2253-J1-TB	Drinking Water	05/22/24 12:30	05/23/24 09:48

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Chain of Custody Record

Client Information		Sampler: E. Kakone/ J. Joseph		Lab PM: Arada, Rachele		Carrier Tracking No(s):		COC No:																																																							
Client Contact: Mr. Erwin Kawata		Phone: (858)205-0730		E-Mail: Rachele.Arada@et.eurofinsus.com		State of Origin: Hawaii		Page: Page 1 of 1																																																							
Company: City & County of Honolulu		PWSID:		Analysis Requested						Job #:																																																					
Address: 630 South Beretania Street		Due Date Requested:		<table border="1"> <tr> <td>Field Filtered Sample (Yes or No)</td> <td>Perform MS/MSD (Yes or No)</td> <td>SUBCONTRACT - 925 - PARTOMY + TIC8</td> <td>SUBCONTRACT - TPH 8015 Diesel and Motor Oil</td> <td>SUBCONTRACT - TPH 8015 Jet Fuel 5</td> <td>SUBCONTRACT - TPH 8015 Jet Fuel 8</td> <td>SUBCONTRACT - 8015 Gas</td> <td>DEAS 553 - ALL Analytes</td> <td>DEAS 537.1 - DW, PPEC, 537.1 Euill list</td> <td>PFAS 1633 - P096 - 1633-6at list</td> <td>8260B - (MOD) Super Volatiles List</td> <td rowspan="5">Total Number of containers</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 925 - PARTOMY + TIC8	SUBCONTRACT - TPH 8015 Diesel and Motor Oil	SUBCONTRACT - TPH 8015 Jet Fuel 5	SUBCONTRACT - TPH 8015 Jet Fuel 8	SUBCONTRACT - 8015 Gas	DEAS 553 - ALL Analytes	DEAS 537.1 - DW, PPEC, 537.1 Euill list	PFAS 1633 - P096 - 1633-6at list	8260B - (MOD) Super Volatiles List	Total Number of containers																																									Preservation Codes:	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUBCONTRACT - 925 - PARTOMY + TIC8	SUBCONTRACT - TPH 8015 Diesel and Motor Oil							SUBCONTRACT - TPH 8015 Jet Fuel 5	SUBCONTRACT - TPH 8015 Jet Fuel 8	SUBCONTRACT - 8015 Gas	DEAS 553 - ALL Analytes	DEAS 537.1 - DW, PPEC, 537.1 Euill list	PFAS 1633 - P096 - 1633-6at list	8260B - (MOD) Super Volatiles List	Total Number of containers																																														
City: Honolulu		TAT Requested (days): Standard		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		A - HCL		M - Hexane																																																							
State, Zip: HI, 96843		PO #: C20525101 exp 05312023		WO #:		B - NaOH		N - None																																																							
Phone: 808-748-5066(Tel)		Project #: 38000861		SSOW#:		C - Zn Acetate		O - AsNaO2																																																							
Email: ekawata@hbws.org		Site: Site J				D - Nitric Acid		P - Na2O4S																																																							
Project Name: HRS-340E - RED-HILL - INTERA						E - NaHSO4		Q - Na2SO3																																																							
						F - MeOH		R - Na2SO3																																																							
						G - Amchlor		S - H2SO4																																																							
						H - Ascorbic Acid		T - TSP Dodecahydrate																																																							
						I - Ice		U - Acetone																																																							
						J - DI Water		V - MCAA																																																							
						K - EDTA		W - pH 4-5																																																							
						L - EDA		Y - Trizma																																																							
								Z - other (specify)																																																							
								Other:																																																							
								Special Instructions/Note: x = testing comes from another container.																																																							

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)	SUBCONTRACT - 925 - PARTOMY + TIC8	SUBCONTRACT - TPH 8015 Diesel and Motor Oil	SUBCONTRACT - TPH 8015 Jet Fuel 5	SUBCONTRACT - TPH 8015 Jet Fuel 8	SUBCONTRACT - 8015 Gas	DEAS 553 - ALL Analytes	DEAS 537.1 - DW, PPEC, 537.1 Euill list	PFAS 1633 - P096 - 1633-6at list	8260B - (MOD) Super Volatiles List	Total Number of containers
BWS2253-J1-AQ	5/22/24	1230	G	Water			4	4			4	3	3	2	4	24
BWS2253-J1-TB	5/22/24	1230	G	Water							2				2	4
BWS2253-J1-FB			G	Water								1				2

Subcontract Notes:

~~625 PAH - Physio~~

8015 TPH D+M, 8015 C, 8015 gas - EEA POM

8015 Gas - EEA POM


8260B - EEA POM

~~625.1 - EEA POM~~

DEAS 537.1 & 535 - EEA POM

PFAS 1633 - EEA SAC

Bill and Report to EEA - Pomona



380-97109 COC

Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months				
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:				

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment: FEDEX Priority Overnight : 275 0082800 52	
Relinquished by: <i>Ea Kaka</i>		Date/Time: 5/22/24; 1400		Company: INTERA Inc.		Received by: <i>Danni Quinz</i>	
Relinquished by:		Date/Time:		Company:		Date/Time: 5-23-24 9:48	
Relinquished by:		Date/Time:		Company:		Date/Time:	

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.5-0.2 = 1.3 (630A) wet frozen
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Eurofins Eaton Analytical Pomona

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

Chain of Custody Record



eurofins

Enviro

Loc: 380
97109

Client Information (Sub Contract Lab)		Sampler:		Lab PM: Arada, Rachele		Carrier Tracking No(s):		COC No: 380-127594.1					
Client Contact: Shipping/Receiving		Phone:		E-Mail: Rachele.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 #: 380-97109-1					
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 6/13/2024		Analysis Requested				Preservation Codes: -					
City: Tustin		TAT Requested (days):											
State, Zip: CA, 92780		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers					
Phone: 714-895-5494(Tel)		WO #:											
Email:		Project #: 38000861		8016B_GRO_LL5030C (MOD) GRO		8260B5030C (MOD) Super Volatiles List		8016B_DR0_LL_CS0510C_LL_HNL_Ranges: C10-C24/C24-C36/C8-C18					
Project Name: INTERA - Red-Hill-Incident		SSOW#:		BT=Tissue, A=Air				Other:					
Site: Honolulu BWS Sites													
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)	8016B_GRO_LL5030C (MOD) GRO	8260B5030C (MOD) Super Volatiles List	8016B_DR0_LL_CS0510C_LL_HNL_Ranges: C10-C24/C24-C36/C8-C18	Total Number of containers	Special Instructions/Note:	
				Preservation Code:									
BWS2253-J1-AQ (380-97109-1)		5/22/24	12:30 Hawaiian		Water		X	X	X		12	MRLs are needed. Extra containers provided for MS/MSD.	
BWS2253-J1-TB (380-97109-2)		5/22/24	12:30 Hawaiian		Water		X	X			4	MRLs are needed. Extra containers provided for MS/MSD	



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		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>X2</i>		Date/Time: <i>5/24/24 12:15</i>		Company: <i>EEA</i>		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <i>1.3/1.4 SC14</i>			



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-97109-1

SDG Number: Site J

Login Number: 97109

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



Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-97109-1

SDG Number: Site J

Login Number: 97109

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 05/24/24 03:18 PM

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

