

# ANALYTICAL REPORT

## PREPARED FOR

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## JOB DESCRIPTION

INTERA - Red-Hill-Incident  
Site J

## JOB NUMBER

380-119253-1

# 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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# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Detection Summary . . . . .	7
Client Sample Results . . . . .	8
Action Limit Summary . . . . .	13
Surrogate Summary . . . . .	15
QC Sample Results . . . . .	18
QC Association Summary . . . . .	30
Lab Chronicle . . . . .	32
Certification Summary . . . . .	33
Method Summary . . . . .	34
Sample Summary . . . . .	35
Chain of Custody . . . . .	36
Receipt Checklists . . . . .	38

# Definitions/Glossary

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

Job ID: 380-119253-1  
 SDG: Site J

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high 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
^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.
☼	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: 380-119253-1

**Job ID: 380-119253-1**

**Eurofins Eaton Analytical Pomona**

## Job Narrative 380-119253-1

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 10/24/2024 10:24 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C.

### Receipt Exceptions

The following samples were received at the laboratory without a sample collection time documented on the chain of custody: BWS2253-J1-AQ (380-119253-1) and BWS2253-J1-TB (380-119253-2). The client was contacted, and the laboratory was instructed to <CHOOSE\_ONE> use a sample collection time of 12:00am OR <EXPLANATION\_REQUIRED>

Logged per container labels

TB: logged per SOP

### GC/MS VOA

Method 8260B: The continuing calibration verification (CCV) associated with batch 570-497411 recovered above the upper control limit for Ethanol and Isopropanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: BWS2253-J1-AQ (380-119253-1), BWS2253-J1-TB (380-119253-2) and (CCVIS 570-497411/3).

Method 8260B: The laboratory control sample (LCS) for analytical batch 570-497411 recovered outside control limits for the following analytes: Isopropanol and Bromochloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following analyte(s) recovered outside control limits for the LCSD associated with analytical batch 570-497411: n-Butylbenzene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8260B: The laboratory control sample duplicate (LCSD) for analytical batch 570-497411 recovered outside control limits for the following analytes: Ethanol and Isopropanol. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 570-497411. 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.

### GC/MS Semi VOA

Method 625.1\_SIM: Surrogate recovery for the following sample was outside the upper control limit: BWS2253-J1-AQ (380-119253-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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.

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# Case Narrative

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

Job ID: 380-119253-1

**Job ID: 380-119253-1 (Continued)**

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## Diesel Range Organics

Method 8015B\_DRO\_LL\_CS: The method reporting limit check (MRL) for preparation batch 570-497002 and analytical batch 570-499795 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.



# Detection Summary

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

Job ID: 380-119253-1  
SDG: Site J

**Client Sample ID: BWS2253-J1-AQ**

**Lab Sample ID: 380-119253-1**

No Detections.

**Client Sample ID: BWS2253-J1-TB**

**Lab Sample ID: 380-119253-2**

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.

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# Client Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

**Client Sample ID: BWS2253-J1-AQ**

**Lab Sample ID: 380-119253-1**

Date Collected: 10/23/24 13:15

Matrix: Drinking Water

Date Received: 10/24/24 10:24

**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			10/31/24 01:09	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			10/31/24 01:09	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,1-Dichloroethane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,1-Dichloroethene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,1-Dichloropropene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			10/31/24 01:09	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			10/31/24 01:09	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/31/24 01:09	1
1,2-Dichloropropane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
1,3-Dichloropropane	<1.0		1.0	ug/L			10/31/24 01:09	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
2,2-Dichloropropane	<1.0		1.0	ug/L			10/31/24 01:09	1
2-Butanone	<10		10	ug/L			10/31/24 01:09	1
2-Chlorotoluene	<1.0		1.0	ug/L			10/31/24 01:09	1
2-Hexanone	<10		10	ug/L			10/31/24 01:09	1
4-Chlorotoluene	<1.0		1.0	ug/L			10/31/24 01:09	1
Acetone	<10		10	ug/L			10/31/24 01:09	1
Benzene	<0.50		0.50	ug/L			10/31/24 01:09	1
Bromobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
Bromochloromethane	<2.0	*+	2.0	ug/L			10/31/24 01:09	1
Bromodichloromethane	<1.0		1.0	ug/L			10/31/24 01:09	1
Bromoform	<5.0		5.0	ug/L			10/31/24 01:09	1
Bromomethane	<25		25	ug/L			10/31/24 01:09	1
Carbon disulfide	<10		10	ug/L			10/31/24 01:09	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/31/24 01:09	1
Chlorobenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
Chloroethane	<5.0		5.0	ug/L			10/31/24 01:09	1
Chloroform	<1.0		1.0	ug/L			10/31/24 01:09	1
Chloromethane	<10		10	ug/L			10/31/24 01:09	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			10/31/24 01:09	1
cis-1,3-Dichloropropane	<0.50		0.50	ug/L			10/31/24 01:09	1
Dibromochloromethane	<2.0		2.0	ug/L			10/31/24 01:09	1
Dibromomethane	<1.0		1.0	ug/L			10/31/24 01:09	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			10/31/24 01:09	1
Diethyl ether	<10		10	ug/L			10/31/24 01:09	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			10/31/24 01:09	1
Ethanol	<100	*+	100	ug/L			10/31/24 01:09	1
Ethylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
Ethylene Dibromide	<1.0		1.0	ug/L			10/31/24 01:09	1
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			10/31/24 01:09	1



# Client Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

**Client Sample ID: BWS2253-J1-AQ**

**Lab Sample ID: 380-119253-1**

**Date Collected: 10/23/24 13:15**

**Matrix: Drinking Water**

**Date Received: 10/24/24 10:24**

**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			10/31/24 01:09	1
Hexane	<5.0		5.0	ug/L			10/31/24 01:09	1
Isobutyl alcohol	<75		75	ug/L			10/31/24 01:09	1
Isopropanol	<75	+	75	ug/L			10/31/24 01:09	1
Isopropylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
m,p-Xylene	<2.0		2.0	ug/L			10/31/24 01:09	1
Methylene Chloride	<10		10	ug/L			10/31/24 01:09	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			10/31/24 01:09	1
MIBK	<10		10	ug/L			10/31/24 01:09	1
Naphthalene	<10		10	ug/L			10/31/24 01:09	1
n-Butylbenzene	<1.0	-	1.0	ug/L			10/31/24 01:09	1
N-Propylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
o-Xylene	<1.0		1.0	ug/L			10/31/24 01:09	1
p-Isopropyltoluene	<1.0		1.0	ug/L			10/31/24 01:09	1
sec-Butylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
Styrene	<1.0		1.0	ug/L			10/31/24 01:09	1
tert-Amyl alcohol	<50		50	ug/L			10/31/24 01:09	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			10/31/24 01:09	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			10/31/24 01:09	1
tert-Butylbenzene	<1.0		1.0	ug/L			10/31/24 01:09	1
Tetrachloroethene	<1.0		1.0	ug/L			10/31/24 01:09	1
Toluene	<1.0		1.0	ug/L			10/31/24 01:09	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			10/31/24 01:09	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/31/24 01:09	1
Trichloroethene	<1.0		1.0	ug/L			10/31/24 01:09	1
Trichlorofluoromethane	<10		10	ug/L			10/31/24 01:09	1
Vinyl acetate	<10		10	ug/L			10/31/24 01:09	1
Vinyl chloride	<0.50		0.50	ug/L			10/31/24 01:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 123		10/31/24 01:09	1
4-Bromofluorobenzene (Surr)	82		80 - 120		10/31/24 01:09	1
Dibromofluoromethane (Surr)	112		78 - 120		10/31/24 01:09	1
Toluene-d8 (Surr)	96		80 - 120		10/31/24 01:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
2-Methylnaphthalene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Acenaphthene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Acenaphthylene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Anthracene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Benzo[a]anthracene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Benzo[a]pyrene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Benzo[b]fluoranthene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Benzo[g,h,i]perylene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Benzo[k]fluoranthene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Chrysene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Dibenz(a,h)anthracene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Fluoranthene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1

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# Client Sample Results

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

Job ID: 380-119253-1  
SDG: Site J

**Client Sample ID: BWS2253-J1-AQ**

**Lab Sample ID: 380-119253-1**

Date Collected: 10/23/24 13:15

Matrix: Drinking Water

Date Received: 10/24/24 10:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Indeno[1,2,3-cd]pyrene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Naphthalene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Phenanthrene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1
Pyrene	<0.21		0.21	ug/L		10/29/24 11:47	11/04/24 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	104		28 - 127	10/29/24 11:47	11/04/24 18:37	1
2-Fluorobiphenyl (Surr)	95		31 - 120	10/29/24 11:47	11/04/24 18:37	1
2-Fluorophenol (Surr)	50		17 - 120	10/29/24 11:47	11/04/24 18:37	1
Nitrobenzene-d5 (Surr)	86		27 - 120	10/29/24 11:47	11/04/24 18:37	1
Phenol-d6 (Surr)	32		10 - 120	10/29/24 11:47	11/04/24 18:37	1
p-Terphenyl-d14 (Surr)	130	S1+	45 - 120	10/29/24 11:47	11/04/24 18:37	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
Hexane, 1,1'-oxybis-	5.2	T J N	ug/L		4.49	112-58-3	10/29/24 11:47	11/07/24 20:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	80		33 - 139	10/29/24 11:47	11/07/24 20:15	1
2-Fluorobiphenyl (Surr)	86		33 - 126	10/29/24 11:47	11/07/24 20:15	1
2-Fluorophenol (Surr)	52		12 - 120	10/29/24 11:47	11/07/24 20:15	1
Nitrobenzene-d5 (Surr)	79		36 - 120	10/29/24 11:47	11/07/24 20:15	1
Phenol-d6 (Surr)	35		10 - 120	10/29/24 11:47	11/07/24 20:15	1
p-Terphenyl-d14 (Surr)	104		47 - 131	10/29/24 11:47	11/07/24 20:15	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			11/04/24 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	67		38 - 134		11/04/24 16:37	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		10/29/24 15:19	11/06/24 14:43	1
Motor Oil Range Organics [C24-C36]	<27		27	ug/L		10/29/24 15:19	11/06/24 14:43	1
C8-C18	<27		27	ug/L		10/29/24 15:19	11/06/24 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane (Surr)	107		60 - 130	10/29/24 15:19	11/06/24 14:43	1

**Client Sample ID: BWS2253-J1-TB**

**Lab Sample ID: 380-119253-2**

Date Collected: 10/23/24 13:15

Matrix: Drinking Water

Date Received: 10/24/24 10:24

**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			10/30/24 22:08	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			10/30/24 22:08	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			10/30/24 22:08	1

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# Client Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

**Client Sample ID: BWS2253-J1-TB**

**Lab Sample ID: 380-119253-2**

**Date Collected: 10/23/24 13:15**

**Matrix: Drinking Water**

**Date Received: 10/24/24 10:24**

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			10/30/24 22:08	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			10/30/24 22:08	1
1,1-Dichloroethane	<1.0		1.0	ug/L			10/30/24 22:08	1
1,1-Dichloroethene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,1-Dichloropropene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			10/30/24 22:08	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			10/30/24 22:08	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/30/24 22:08	1
1,2-Dichloropropane	<1.0		1.0	ug/L			10/30/24 22:08	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
1,3-Dichloropropane	<1.0		1.0	ug/L			10/30/24 22:08	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
2,2-Dichloropropane	<1.0		1.0	ug/L			10/30/24 22:08	1
2-Butanone	<10		10	ug/L			10/30/24 22:08	1
2-Chlorotoluene	<1.0		1.0	ug/L			10/30/24 22:08	1
2-Hexanone	<10		10	ug/L			10/30/24 22:08	1
4-Chlorotoluene	<1.0		1.0	ug/L			10/30/24 22:08	1
Acetone	<10		10	ug/L			10/30/24 22:08	1
Benzene	<0.50		0.50	ug/L			10/30/24 22:08	1
Bromobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
Bromochloromethane	<2.0	*+	2.0	ug/L			10/30/24 22:08	1
Bromodichloromethane	<1.0		1.0	ug/L			10/30/24 22:08	1
Bromoform	<5.0		5.0	ug/L			10/30/24 22:08	1
Bromomethane	<25		25	ug/L			10/30/24 22:08	1
Carbon disulfide	<10		10	ug/L			10/30/24 22:08	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/30/24 22:08	1
Chlorobenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
Chloroethane	<5.0		5.0	ug/L			10/30/24 22:08	1
Chloroform	<1.0		1.0	ug/L			10/30/24 22:08	1
Chloromethane	<10		10	ug/L			10/30/24 22:08	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			10/30/24 22:08	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/30/24 22:08	1
Dibromochloromethane	<2.0		2.0	ug/L			10/30/24 22:08	1
Dibromomethane	<1.0		1.0	ug/L			10/30/24 22:08	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			10/30/24 22:08	1
Diethyl ether	<10		10	ug/L			10/30/24 22:08	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			10/30/24 22:08	1
Ethanol	<100	*+	100	ug/L			10/30/24 22:08	1
Ethylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
Ethylene Dibromide	<1.0		1.0	ug/L			10/30/24 22:08	1
Ethyl-t-butyl ether (ETBE)	<2.0		2.0	ug/L			10/30/24 22:08	1
Hexachloro-1,3-butadiene	<10		10	ug/L			10/30/24 22:08	1
Hexane	<5.0		5.0	ug/L			10/30/24 22:08	1
Isobutyl alcohol	<75		75	ug/L			10/30/24 22:08	1

# Client Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

**Client Sample ID: BWS2253-J1-TB**

**Lab Sample ID: 380-119253-2**

Date Collected: 10/23/24 13:15

Matrix: Drinking Water

Date Received: 10/24/24 10:24

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropanol	<75	*+	75	ug/L			10/30/24 22:08	1
Isopropylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
m,p-Xylene	<2.0		2.0	ug/L			10/30/24 22:08	1
Methylene Chloride	<10		10	ug/L			10/30/24 22:08	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			10/30/24 22:08	1
MIBK	<10		10	ug/L			10/30/24 22:08	1
Naphthalene	<10		10	ug/L			10/30/24 22:08	1
n-Butylbenzene	<1.0	*-	1.0	ug/L			10/30/24 22:08	1
N-Propylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
o-Xylene	<1.0		1.0	ug/L			10/30/24 22:08	1
p-Isopropyltoluene	<1.0		1.0	ug/L			10/30/24 22:08	1
sec-Butylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
Styrene	<1.0		1.0	ug/L			10/30/24 22:08	1
tert-Amyl alcohol	<50		50	ug/L			10/30/24 22:08	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			10/30/24 22:08	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			10/30/24 22:08	1
tert-Butylbenzene	<1.0		1.0	ug/L			10/30/24 22:08	1
Tetrachloroethene	<1.0		1.0	ug/L			10/30/24 22:08	1
Toluene	<1.0		1.0	ug/L			10/30/24 22:08	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			10/30/24 22:08	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/30/24 22:08	1
Trichloroethene	<1.0		1.0	ug/L			10/30/24 22:08	1
Trichlorofluoromethane	<10		10	ug/L			10/30/24 22:08	1
Vinyl acetate	<10		10	ug/L			10/30/24 22:08	1
Vinyl chloride	<0.50		0.50	ug/L			10/30/24 22:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 123		10/30/24 22:08	1
4-Bromofluorobenzene (Surr)	82		80 - 120		10/30/24 22:08	1
Dibromofluoromethane (Surr)	114		78 - 120		10/30/24 22:08	1
Toluene-d8 (Surr)	96		80 - 120		10/30/24 22:08	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			11/04/24 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68		38 - 134		11/04/24 17:24	1

# Action Limit Summary

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

Job ID: 380-119253-1  
SDG: Site J

Client Sample ID: BWS2253-J1-AQ

Lab Sample ID: 380-119253-1

## 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
Benzo[a]pyrene	<0.21		ug/L	0.2		0.21	625.1 SIM	Total/NA

Client Sample ID: BWS2253-J1-TB

Lab Sample ID: 380-119253-2

## 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

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# Action Limit Summary

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: 380-119253-2**

## 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
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



# Surrogate Summary

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

Job ID: 380-119253-1  
 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)
380-119253-1	BWS2253-J1-AQ	100	82	112	96
380-119253-2	BWS2253-J1-TB	99	82	114	96

#### 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 570-497411/1003	Lab Control Sample	96	88	109	94
LCSD 570-497411/4	Lab Control Sample Dup	94	91	109	94
MB 570-497411/6	Method Blank	98	82	115	94

#### Surrogate Legend

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

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

## Method: 625.1 - Semivolatile 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)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
380-119253-1	BWS2253-J1-AQ	80	86	52	79	35	104

#### 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)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (33-139)	FBP (33-126)	2FP (12-120)	NBZ (36-120)	PHL6 (10-120)	TPHd14 (47-131)
MB 570-496453/1-A	Method Blank	76	85	60	90	38	91

#### Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

FBP = 2-Fluorobiphenyl (Surr)

2FP = 2-Fluorophenol (Surr)

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# Surrogate Summary

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

Job ID: 380-119253-1  
 SDG: Site J

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-119253-1	BWS2253-J1-AQ	104	95	50	86	32	130 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (28-127)	FBP (31-120)	2FP (17-120)	NBZ (27-120)	PHL6 (10-120)	TPHd14 (45-120)
380-119304-A-1-A MS	Matrix Spike	102	93	55	91	36	107
380-119304-A-1-B MSD	Matrix Spike Duplicate	101	92	55	76	36	104
LCS 570-496453/2-A	Lab Control Sample	104	98	64	78	42	112
LCSd 570-496453/3-A	Lab Control Sample Dup	99	96	63	77	41	110
MB 570-496453/1-A	Method Blank	109	96	63	95	39	117

### 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)
		BFB1 (38-134)
380-119253-1	BWS2253-J1-AQ	67
380-119253-2	BWS2253-J1-TB	68

### 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)
LCS 570-498920/4	Lab Control Sample	78



# Surrogate Summary

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

Job ID: 380-119253-1  
 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)
LCSD 570-498920/5	Lab Control Sample Dup	78
MB 570-498920/6	Method Blank	72
MRL 570-498920/3	Lab Control Sample	70

**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)
380-119253-1	BWS2253-J1-AQ	107

**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)
380-119304-C-1-A MS	Matrix Spike	108
380-119304-C-1-B MSD	Matrix Spike Duplicate	109
LCS 570-497002/2-A	Lab Control Sample	112
LCSD 570-497002/3-A	Lab Control Sample Dup	109
MB 570-497002/1-A	Method Blank	109
MRL 570-497002/4-A	Lab Control Sample	109

**Surrogate Legend**

OTCSN = n-Octacosane (Surr)

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: MB 570-497411/6**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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			10/30/24 20:38	1
1,1,1-Trichloroethane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,1,2,2-Tetrachloroethane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<10		10	ug/L			10/30/24 20:38	1
1,1,2-Trichloroethane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,1-Dichloroethane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,1-Dichloroethene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,1-Dichloropropene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,2,3-Trichlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,2,3-Trichloropropane	<5.0		5.0	ug/L			10/30/24 20:38	1
1,2,4-Trichlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,2,4-Trimethylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,2-Dibromo-3-Chloropropane	<10		10	ug/L			10/30/24 20:38	1
1,2-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,2-Dichloroethane	<0.50		0.50	ug/L			10/30/24 20:38	1
1,2-Dichloropropane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,3,5-Trimethylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,3-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
1,3-Dichloropropane	<1.0		1.0	ug/L			10/30/24 20:38	1
1,4-Dichlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
2,2-Dichloropropane	<1.0		1.0	ug/L			10/30/24 20:38	1
2-Butanone	<10		10	ug/L			10/30/24 20:38	1
2-Chlorotoluene	<1.0		1.0	ug/L			10/30/24 20:38	1
2-Hexanone	<10		10	ug/L			10/30/24 20:38	1
4-Chlorotoluene	<1.0		1.0	ug/L			10/30/24 20:38	1
Acetone	<10		10	ug/L			10/30/24 20:38	1
Benzene	<0.50		0.50	ug/L			10/30/24 20:38	1
Bromobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
Bromochloromethane	<2.0		2.0	ug/L			10/30/24 20:38	1
Bromodichloromethane	<1.0		1.0	ug/L			10/30/24 20:38	1
Bromoform	<5.0		5.0	ug/L			10/30/24 20:38	1
Bromomethane	<25		25	ug/L			10/30/24 20:38	1
Carbon disulfide	<10		10	ug/L			10/30/24 20:38	1
Carbon tetrachloride	<0.50		0.50	ug/L			10/30/24 20:38	1
Chlorobenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
Chloroethane	<5.0		5.0	ug/L			10/30/24 20:38	1
Chloroform	<1.0		1.0	ug/L			10/30/24 20:38	1
Chloromethane	<10		10	ug/L			10/30/24 20:38	1
cis-1,2-Dichloroethene	<1.0		1.0	ug/L			10/30/24 20:38	1
cis-1,3-Dichloropropene	<0.50		0.50	ug/L			10/30/24 20:38	1
Dibromochloromethane	<2.0		2.0	ug/L			10/30/24 20:38	1
Dibromomethane	<1.0		1.0	ug/L			10/30/24 20:38	1
Dichlorodifluoromethane	<5.0		5.0	ug/L			10/30/24 20:38	1
Diethyl ether	<10		10	ug/L			10/30/24 20:38	1
Di-isopropyl ether (DIPE)	<2.0		2.0	ug/L			10/30/24 20:38	1
Ethanol	<100		100	ug/L			10/30/24 20:38	1
Ethylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
Ethylene Dibromide	<1.0		1.0	ug/L			10/30/24 20:38	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: MB 570-497411/6**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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			10/30/24 20:38	1
Hexachloro-1,3-butadiene	<10		10	ug/L			10/30/24 20:38	1
Hexane	<5.0		5.0	ug/L			10/30/24 20:38	1
Isobutyl alcohol	<75		75	ug/L			10/30/24 20:38	1
Isopropanol	<75		75	ug/L			10/30/24 20:38	1
Isopropylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
m,p-Xylene	<2.0		2.0	ug/L			10/30/24 20:38	1
Methylene Chloride	<10		10	ug/L			10/30/24 20:38	1
Methyl-t-Butyl Ether (MTBE)	<1.0		1.0	ug/L			10/30/24 20:38	1
MIBK	<10		10	ug/L			10/30/24 20:38	1
Naphthalene	<10		10	ug/L			10/30/24 20:38	1
n-Butylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
N-Propylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
o-Xylene	<1.0		1.0	ug/L			10/30/24 20:38	1
p-Isopropyltoluene	<1.0		1.0	ug/L			10/30/24 20:38	1
sec-Butylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
Styrene	<1.0		1.0	ug/L			10/30/24 20:38	1
tert-Amyl alcohol	<50		50	ug/L			10/30/24 20:38	1
Tert-amyl-methyl ether (TAME)	<2.0		2.0	ug/L			10/30/24 20:38	1
tert-Butyl alcohol (TBA)	<10		10	ug/L			10/30/24 20:38	1
tert-Butylbenzene	<1.0		1.0	ug/L			10/30/24 20:38	1
Tetrachloroethene	<1.0		1.0	ug/L			10/30/24 20:38	1
Toluene	<1.0		1.0	ug/L			10/30/24 20:38	1
trans-1,2-Dichloroethene	<1.0		1.0	ug/L			10/30/24 20:38	1
trans-1,3-Dichloropropene	<0.50		0.50	ug/L			10/30/24 20:38	1
Trichloroethene	<1.0		1.0	ug/L			10/30/24 20:38	1
Trichlorofluoromethane	<10		10	ug/L			10/30/24 20:38	1
Vinyl acetate	<10		10	ug/L			10/30/24 20:38	1
Vinyl chloride	<0.50		0.50	ug/L			10/30/24 20:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 123		10/30/24 20:38	1
4-Bromofluorobenzene (Surr)	82		80 - 120		10/30/24 20:38	1
Dibromofluoromethane (Surr)	115		78 - 120		10/30/24 20:38	1
Toluene-d8 (Surr)	94		80 - 120		10/30/24 20:38	1

**Lab Sample ID: LCS 570-497411/1003**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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	21.4		ug/L		107	80 - 122
1,1,1-Trichloroethane	20.0	19.4		ug/L		97	78 - 125
1,1,2,2-Tetrachloroethane	20.0	20.1		ug/L		101	79 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	26.3		ug/L		131	72 - 138
1,1,2-Trichloroethane	20.0	20.2		ug/L		101	80 - 124
1,1-Dichloroethane	20.0	22.3		ug/L		112	80 - 127
1,1-Dichloroethene	20.0	21.8		ug/L		109	80 - 133

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: LCS 570-497411/1003**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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	20.3		ug/L		102	79 - 126
1,2,3-Trichlorobenzene	20.0	18.9		ug/L		94	79 - 128
1,2,3-Trichloropropane	20.0	18.8		ug/L		94	71 - 128
1,2,4-Trichlorobenzene	20.0	17.7		ug/L		88	77 - 126
1,2,4-Trimethylbenzene	20.0	18.0		ug/L		90	80 - 121
1,2-Dibromo-3-Chloropropane	20.0	16.0		ug/L		80	66 - 122
1,2-Dichlorobenzene	20.0	21.5		ug/L		107	80 - 121
1,2-Dichloroethane	20.0	19.7		ug/L		98	77 - 122
1,2-Dichloropropane	20.0	20.5		ug/L		103	80 - 122
1,3,5-Trimethylbenzene	20.0	18.8		ug/L		94	80 - 123
1,3-Dichlorobenzene	20.0	20.7		ug/L		104	80 - 120
1,3-Dichloropropane	20.0	20.2		ug/L		101	80 - 121
1,4-Dichlorobenzene	20.0	21.2		ug/L		106	80 - 120
2,2-Dichloropropane	20.0	19.0		ug/L		95	68 - 143
2-Butanone	20.0	24.4		ug/L		122	61 - 139
2-Chlorotoluene	20.0	19.1		ug/L		95	80 - 121
2-Hexanone	20.0	19.8		ug/L		99	63 - 134
4-Chlorotoluene	20.0	18.3		ug/L		92	80 - 121
Acetone	20.0	24.0		ug/L		120	45 - 150
Benzene	20.0	20.3		ug/L		101	80 - 121
Bromobenzene	20.0	21.8		ug/L		109	80 - 120
Bromochloromethane	20.0	24.7	*+	ug/L		124	80 - 121
Bromodichloromethane	20.0	20.3		ug/L		102	80 - 121
Bromoform	20.0	21.1		ug/L		106	78 - 124
Bromomethane	20.0	14.1	J	ug/L		70	48 - 156
Carbon disulfide	20.0	22.5		ug/L		113	76 - 129
Carbon tetrachloride	20.0	21.6		ug/L		108	71 - 137
Chlorobenzene	20.0	21.2		ug/L		106	80 - 120
Chloroethane	20.0	23.3		ug/L		117	73 - 138
Chloroform	20.0	22.6		ug/L		113	80 - 121
Chloromethane	20.0	18.6		ug/L		93	57 - 138
cis-1,2-Dichloroethene	20.0	22.4		ug/L		112	80 - 125
cis-1,3-Dichloropropene	20.0	17.5		ug/L		87	80 - 120
Dibromochloromethane	20.0	21.1		ug/L		106	80 - 126
Dibromomethane	20.0	20.5		ug/L		103	80 - 120
Dichlorodifluoromethane	20.0	23.8		ug/L		119	44 - 148
Diethyl ether	20.0	21.4		ug/L		107	71 - 132
Di-isopropyl ether (DIPE)	20.0	22.6		ug/L		113	75 - 134
Ethanol	200	336		ug/L		168	50 - 168
Ethylbenzene	20.0	18.5		ug/L		92	80 - 121
Ethylene Dibromide	20.0	20.1		ug/L		101	80 - 120
Ethyl-t-butyl ether (ETBE)	20.0	17.9		ug/L		89	80 - 124
Isopropylbenzene	20.0	19.7		ug/L		99	80 - 121
m,p-Xylene	40.0	37.0		ug/L		92	80 - 123
Methylene Chloride	20.0	22.8		ug/L		114	80 - 121
Methyl-t-Butyl Ether (MTBE)	20.0	18.4		ug/L		92	78 - 123
MIBK	20.0	18.1		ug/L		91	67 - 125
Naphthalene	20.0	15.2		ug/L		76	65 - 133
n-Butylbenzene	20.0	16.2		ug/L		81	80 - 125

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: LCS 570-497411/1003**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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	18.9		ug/L		95	80 - 125
o-Xylene	20.0	17.5		ug/L		88	80 - 122
p-Isopropyltoluene	20.0	17.2		ug/L		86	80 - 124
sec-Butylbenzene	20.0	18.0		ug/L		90	80 - 122
Styrene	20.0	20.1		ug/L		101	80 - 120
tert-Amyl alcohol	100	99.0		ug/L		99	51 - 148
Tert-amyl-methyl ether (TAME)	20.0	16.9		ug/L		85	74 - 125
tert-Butyl alcohol (TBA)	100	94.3		ug/L		94	70 - 141
tert-Butylbenzene	20.0	17.6		ug/L		88	80 - 122
Tetrachloroethene	20.0	21.5		ug/L		107	80 - 122
Toluene	20.0	20.4		ug/L		102	80 - 120
trans-1,2-Dichloroethene	20.0	23.0		ug/L		115	80 - 122
trans-1,3-Dichloropropene	20.0	17.1		ug/L		86	80 - 125
Trichloroethene	20.0	20.5		ug/L		102	80 - 120
Trichlorofluoromethane	20.0	25.3		ug/L		127	67 - 142
Vinyl acetate	20.0	23.5		ug/L		117	62 - 140
Vinyl chloride	20.0	22.3		ug/L		112	66 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		70 - 123
4-Bromofluorobenzene (Surr)	88		80 - 120
Dibromofluoromethane (Surr)	109		78 - 120
Toluene-d8 (Surr)	94		80 - 120

**Lab Sample ID: LCSD 570-497411/4**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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	20.6		ug/L		103	80 - 122	4	20
1,1,1-Trichloroethane	20.0	18.6		ug/L		93	78 - 125	4	20
1,1,2,2-Tetrachloroethane	20.0	20.4		ug/L		102	79 - 127	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.7		ug/L		119	72 - 138	10	20
1,1,2-Trichloroethane	20.0	19.8		ug/L		99	80 - 124	2	20
1,1-Dichloroethane	20.0	20.7		ug/L		103	80 - 127	8	20
1,1-Dichloroethene	20.0	19.4		ug/L		97	80 - 133	11	20
1,1-Dichloropropene	20.0	18.5		ug/L		93	79 - 126	9	20
1,2,3-Trichlorobenzene	20.0	19.0		ug/L		95	79 - 128	1	20
1,2,3-Trichloropropane	20.0	18.9		ug/L		94	71 - 128	0	20
1,2,4-Trichlorobenzene	20.0	17.1		ug/L		86	77 - 126	3	20
1,2,4-Trimethylbenzene	20.0	17.3		ug/L		86	80 - 121	4	20
1,2-Dibromo-3-Chloropropane	20.0	16.5		ug/L		82	66 - 122	3	20
1,2-Dichlorobenzene	20.0	21.3		ug/L		106	80 - 121	1	20
1,2-Dichloroethane	20.0	19.6		ug/L		98	77 - 122	1	20
1,2-Dichloropropane	20.0	19.8		ug/L		99	80 - 122	4	20
1,3,5-Trimethylbenzene	20.0	18.8		ug/L		94	80 - 123	0	20
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120	1	20
1,3-Dichloropropane	20.0	19.8		ug/L		99	80 - 121	2	20

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: LCSD 570-497411/4**  
**Matrix: Water**  
**Analysis Batch: 497411**

**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	21.0		ug/L		105	80 - 120	1	20
2,2-Dichloropropane	20.0	17.2		ug/L		86	68 - 143	10	20
2-Butanone	20.0	24.4		ug/L		122	61 - 139	0	25
2-Chlorotoluene	20.0	18.7		ug/L		93	80 - 121	2	20
2-Hexanone	20.0	20.3		ug/L		102	63 - 134	3	21
4-Chlorotoluene	20.0	17.8		ug/L		89	80 - 121	3	20
Acetone	20.0	23.4		ug/L		117	45 - 150	3	23
Benzene	20.0	19.8		ug/L		99	80 - 121	3	20
Bromobenzene	20.0	21.8		ug/L		109	80 - 120	0	20
Bromochloromethane	20.0	22.8		ug/L		114	80 - 121	8	20
Bromodichloromethane	20.0	19.7		ug/L		99	80 - 121	3	20
Bromoform	20.0	21.3		ug/L		106	78 - 124	1	20
Bromomethane	20.0	14.7	J	ug/L		74	48 - 156	5	21
Carbon disulfide	20.0	21.2		ug/L		106	76 - 129	6	20
Carbon tetrachloride	20.0	19.7		ug/L		98	71 - 137	10	20
Chlorobenzene	20.0	20.4		ug/L		102	80 - 120	4	20
Chloroethane	20.0	26.1		ug/L		131	73 - 138	11	20
Chloroform	20.0	20.8		ug/L		104	80 - 121	8	20
Chloromethane	20.0	16.7		ug/L		84	57 - 138	11	20
cis-1,2-Dichloroethene	20.0	21.8		ug/L		109	80 - 125	3	20
cis-1,3-Dichloropropene	20.0	16.6		ug/L		83	80 - 120	5	20
Dibromochloromethane	20.0	21.1		ug/L		105	80 - 126	0	20
Dibromomethane	20.0	20.9		ug/L		105	80 - 120	2	20
Dichlorodifluoromethane	20.0	22.9		ug/L		115	44 - 148	4	28
Diethyl ether	20.0	21.2		ug/L		106	71 - 132	1	20
Di-isopropyl ether (DIPE)	20.0	21.7		ug/L		108	75 - 134	4	20
Ethanol	200	402	*+	ug/L		201	50 - 168	18	29
Ethylbenzene	20.0	18.0		ug/L		90	80 - 121	3	20
Ethylene Dibromide	20.0	20.2		ug/L		101	80 - 120	0	20
Ethyl-t-butyl ether (ETBE)	20.0	16.8		ug/L		84	80 - 124	6	20
Isopropylbenzene	20.0	19.1		ug/L		96	80 - 121	3	20
m,p-Xylene	40.0	36.0		ug/L		90	80 - 123	3	20
Methylene Chloride	20.0	22.1		ug/L		110	80 - 121	3	20
Methyl-t-Butyl Ether (MTBE)	20.0	17.6		ug/L		88	78 - 123	4	20
MIBK	20.0	17.7		ug/L		89	67 - 125	2	20
Naphthalene	20.0	15.0		ug/L		75	65 - 133	2	20
n-Butylbenzene	20.0	15.7	*-	ug/L		79	80 - 125	3	20
N-Propylbenzene	20.0	18.6		ug/L		93	80 - 125	2	20
o-Xylene	20.0	17.3		ug/L		86	80 - 122	2	20
p-Isopropyltoluene	20.0	16.9		ug/L		85	80 - 124	2	20
sec-Butylbenzene	20.0	17.1		ug/L		86	80 - 122	5	20
Styrene	20.0	19.2		ug/L		96	80 - 120	4	20
tert-Amyl alcohol	100	100		ug/L		100	51 - 148	1	29
Tert-amyl-methyl ether (TAME)	20.0	16.5		ug/L		83	74 - 125	2	20
tert-Butyl alcohol (TBA)	100	101		ug/L		101	70 - 141	7	20
tert-Butylbenzene	20.0	16.5		ug/L		83	80 - 122	6	20
Tetrachloroethene	20.0	20.6		ug/L		103	80 - 122	4	20
Toluene	20.0	19.3		ug/L		96	80 - 120	6	20
trans-1,2-Dichloroethene	20.0	22.4		ug/L		112	80 - 122	3	20

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
SDG: Site J

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

Lab Sample ID: LCSD 570-497411/4  
Matrix: Water  
Analysis Batch: 497411

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	16.6		ug/L		83	80 - 125	3	20
Trichloroethene	20.0	19.4		ug/L		97	80 - 120	6	20
Trichlorofluoromethane	20.0	24.2		ug/L		121	67 - 142	4	20
Vinyl acetate	20.0	21.2		ug/L		106	62 - 140	10	21
Vinyl chloride	20.0	21.6		ug/L		108	66 - 136	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	94		70 - 123
4-Bromofluorobenzene (Surr)	91		80 - 120
Dibromofluoromethane (Surr)	109		78 - 120
Toluene-d8 (Surr)	94		80 - 120

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

Lab Sample ID: MB 570-496453/1-A  
Matrix: Water  
Analysis Batch: 500626

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 496453

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	10/28/24 12:16	11/07/24 18:41	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	76		33 - 139	10/28/24 12:16	11/07/24 18:41	1
2-Fluorobiphenyl (Surr)	85		33 - 126	10/28/24 12:16	11/07/24 18:41	1
2-Fluorophenol (Surr)	60		12 - 120	10/28/24 12:16	11/07/24 18:41	1
Nitrobenzene-d5 (Surr)	90		36 - 120	10/28/24 12:16	11/07/24 18:41	1
Phenol-d6 (Surr)	38		10 - 120	10/28/24 12:16	11/07/24 18:41	1
p-Terphenyl-d14 (Surr)	91		47 - 131	10/28/24 12:16	11/07/24 18:41	1

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

Lab Sample ID: MB 570-496453/1-A  
Matrix: Water  
Analysis Batch: 498190

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 496453

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
2-Methylnaphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Acenaphthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Acenaphthylene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[a]anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[a]pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[b]fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[g,h,i]perylene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Benzo[k]fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Chrysene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Dibenz(a,h)anthracene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1

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# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: MB 570-496453/1-A**  
**Matrix: Water**  
**Analysis Batch: 498190**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Fluorene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Naphthalene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Phenanthrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1
Pyrene	<0.20		0.20	ug/L		10/28/24 12:16	11/01/24 10:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	109		28 - 127	10/28/24 12:16	11/01/24 10:13	1
2-Fluorobiphenyl (Surr)	96		31 - 120	10/28/24 12:16	11/01/24 10:13	1
2-Fluorophenol (Surr)	63		17 - 120	10/28/24 12:16	11/01/24 10:13	1
Nitrobenzene-d5 (Surr)	95		27 - 120	10/28/24 12:16	11/01/24 10:13	1
Phenol-d6 (Surr)	39		10 - 120	10/28/24 12:16	11/01/24 10:13	1
p-Terphenyl-d14 (Surr)	117		45 - 120	10/28/24 12:16	11/01/24 10:13	1

**Lab Sample ID: LCS 570-496453/2-A**  
**Matrix: Water**  
**Analysis Batch: 498190**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	20.0	16.0		ug/L		80	47 - 120
2-Methylnaphthalene	20.0	18.3		ug/L		91	43 - 120
Acenaphthene	20.0	19.7		ug/L		99	60 - 132
Acenaphthylene	20.0	19.5		ug/L		97	54 - 126
Anthracene	20.0	23.2		ug/L		116	43 - 120
Benzo[a]anthracene	20.0	22.4		ug/L		112	42 - 133
Benzo[a]pyrene	20.0	22.8		ug/L		114	32 - 148
Benzo[b]fluoranthene	20.0	23.0		ug/L		115	42 - 140
Benzo[g,h,i]perylene	20.0	21.4		ug/L		107	1 - 195
Benzo[k]fluoranthene	20.0	23.3		ug/L		117	25 - 146
Chrysene	20.0	21.8		ug/L		109	44 - 140
Dibenz(a,h)anthracene	20.0	23.5		ug/L		117	1 - 200
Fluoranthene	20.0	23.7		ug/L		118	43 - 121
Fluorene	20.0	20.5		ug/L		102	70 - 120
Indeno[1,2,3-cd]pyrene	20.0	22.9		ug/L		115	1 - 151
Naphthalene	20.0	15.8		ug/L		79	36 - 120
Phenanthrene	20.0	22.8		ug/L		114	65 - 120
Pyrene	20.0	23.3		ug/L		116	70 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	104		28 - 127
2-Fluorobiphenyl (Surr)	98		31 - 120
2-Fluorophenol (Surr)	64		17 - 120
Nitrobenzene-d5 (Surr)	78		27 - 120
Phenol-d6 (Surr)	42		10 - 120
p-Terphenyl-d14 (Surr)	112		45 - 120



# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: LCSD 570-496453/3-A**  
**Matrix: Water**  
**Analysis Batch: 498190**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	20.0	15.5		ug/L		78	47 - 120	3	20
2-Methylnaphthalene	20.0	17.7		ug/L		89	43 - 120	3	20
Acenaphthene	20.0	19.6		ug/L		98	60 - 132	0	29
Acenaphthylene	20.0	19.5		ug/L		97	54 - 126	0	45
Anthracene	20.0	22.5		ug/L		113	43 - 120	3	40
Benzo[a]anthracene	20.0	21.9		ug/L		109	42 - 133	2	32
Benzo[a]pyrene	20.0	22.1		ug/L		111	32 - 148	3	43
Benzo[b]fluoranthene	20.0	22.9		ug/L		114	42 - 140	1	43
Benzo[g,h,i]perylene	20.0	21.1		ug/L		105	1 - 195	2	61
Benzo[k]fluoranthene	20.0	22.7		ug/L		114	25 - 146	3	38
Chrysene	20.0	21.1		ug/L		106	44 - 140	3	53
Dibenz(a,h)anthracene	20.0	22.8		ug/L		114	1 - 200	3	75
Fluoranthene	20.0	22.6		ug/L		113	43 - 121	5	40
Fluorene	20.0	20.3		ug/L		102	70 - 120	1	23
Indeno[1,2,3-cd]pyrene	20.0	22.2		ug/L		111	1 - 151	3	60
Naphthalene	20.0	15.4		ug/L		77	36 - 120	3	39
Phenanthrene	20.0	21.9		ug/L		109	65 - 120	4	24
Pyrene	20.0	23.2		ug/L		116	70 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
2,4,6-Tribromophenol (Surr)	99		28 - 127
2-Fluorobiphenyl (Surr)	96		31 - 120
2-Fluorophenol (Surr)	63		17 - 120
Nitrobenzene-d5 (Surr)	77		27 - 120
Phenol-d6 (Surr)	41		10 - 120
p-Terphenyl-d14 (Surr)	110		45 - 120

**Lab Sample ID: 380-119304-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 499085**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	<0.19		19.4	17.6		ug/L		91	36 - 120
2-Methylnaphthalene	<0.19		19.4	19.7		ug/L		101	32 - 124
Acenaphthene	<0.19		19.4	18.4		ug/L		95	47 - 145
Acenaphthylene	<0.19		19.4	17.5		ug/L		90	33 - 145
Anthracene	<0.19		19.4	20.5		ug/L		105	27 - 133
Benzo[a]anthracene	<0.19		19.4	20.4		ug/L		105	33 - 143
Benzo[a]pyrene	<0.19		19.4	17.6		ug/L		90	17 - 163
Benzo[b]fluoranthene	<0.19		19.4	20.4		ug/L		105	24 - 159
Benzo[g,h,i]perylene	<0.19		19.4	25.4		ug/L		130	1 - 219
Benzo[k]fluoranthene	<0.19		19.4	20.7		ug/L		106	11 - 162
Chrysene	<0.19		19.4	20.5		ug/L		105	17 - 168
Dibenz(a,h)anthracene	<0.19		19.4	28.8		ug/L		148	1 - 227
Fluoranthene	<0.19		19.4	21.5		ug/L		110	26 - 137
Fluorene	<0.19		19.4	19.4		ug/L		100	59 - 121
Indeno[1,2,3-cd]pyrene	<0.19		19.4	27.0		ug/L		139	1 - 171
Naphthalene	<0.19		19.4	17.1		ug/L		88	21 - 133

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: 380-119304-A-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 499085**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Phenanthrene	<0.19		19.4	20.7		ug/L		106	54 - 120
Pyrene	<0.19		19.4	21.4		ug/L		110	52 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol (Surr)	102		28 - 127
2-Fluorobiphenyl (Surr)	93		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	91		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	107		45 - 120

**Lab Sample ID: 380-119304-A-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 499085**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 496453**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	<0.19		19.2	14.8		ug/L		77	36 - 120	17	30
2-Methylnaphthalene	<0.19		19.2	17.2		ug/L		90	32 - 124	14	30
Acenaphthene	<0.19		19.2	18.2		ug/L		95	47 - 145	1	48
Acenaphthylene	<0.19		19.2	18.1		ug/L		95	33 - 145	4	74
Anthracene	<0.19		19.2	21.3		ug/L		111	27 - 133	3	66
Benzo[a]anthracene	<0.19		19.2	20.0		ug/L		104	33 - 143	2	53
Benzo[a]pyrene	<0.19		19.2	19.7		ug/L		102	17 - 163	11	72
Benzo[b]fluoranthene	<0.19		19.2	20.0		ug/L		104	24 - 159	2	71
Benzo[g,h,i]perylene	<0.19		19.2	20.4		ug/L		106	1 - 219	22	97
Benzo[k]fluoranthene	<0.19		19.2	20.9		ug/L		109	11 - 162	1	63
Chrysene	<0.19		19.2	19.9		ug/L		103	17 - 168	3	87
Dibenz(a,h)anthracene	<0.19		19.2	21.9		ug/L		114	1 - 227	27	126
Fluoranthene	<0.19		19.2	21.0		ug/L		109	26 - 137	2	66
Fluorene	<0.19		19.2	18.8		ug/L		98	59 - 121	3	38
Indeno[1,2,3-cd]pyrene	<0.19		19.2	20.7		ug/L		108	1 - 171	26	99
Naphthalene	<0.19		19.2	14.6		ug/L		76	21 - 133	16	65
Phenanthrene	<0.19		19.2	20.5		ug/L		107	54 - 120	1	39
Pyrene	<0.19		19.2	21.4		ug/L		111	52 - 120	0	49

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2,4,6-Tribromophenol (Surr)	101		28 - 127
2-Fluorobiphenyl (Surr)	92		31 - 120
2-Fluorophenol (Surr)	55		17 - 120
Nitrobenzene-d5 (Surr)	76		27 - 120
Phenol-d6 (Surr)	36		10 - 120
p-Terphenyl-d14 (Surr)	104		45 - 120

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: MB 570-498920/6**  
**Matrix: Water**  
**Analysis Batch: 498920**

**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			11/04/24 11:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		38 - 134				11/04/24 11:41	1

**Lab Sample ID: LCS 570-498920/4**  
**Matrix: Water**  
**Analysis Batch: 498920**

**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	337		ug/L		84	78 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	78		38 - 134				

**Lab Sample ID: LCSD 570-498920/5**  
**Matrix: Water**  
**Analysis Batch: 498920**

**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	329		ug/L		82	78 - 120	2	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	78		38 - 134						

**Lab Sample ID: MRL 570-498920/3**  
**Matrix: Water**  
**Analysis Batch: 498920**

**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	12.9		ug/L		129	50 - 150
Surrogate	MRL %Recovery	MRL Qualifier	Limits				
4-Bromofluorobenzene (Surr)	70		38 - 134				

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

**Lab Sample ID: MB 570-497002/1-A**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (C10-C24)	<25		25	ug/L		10/29/24 15:18	11/06/24 12:34	1
Motor Oil Range Organics [C24-C36]	<25		25	ug/L		10/29/24 15:18	11/06/24 12:34	1
C8-C18	<25		25	ug/L		10/29/24 15:18	11/06/24 12:34	1

Eurofins Eaton Analytical Pomona

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: MB 570-497002/1-A**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

		MB MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
<i>n</i> -Octacosane (Surr)	109		60 - 130	10/29/24 15:18	11/06/24 12:34	1				

**Lab Sample ID: LCS 570-497002/2-A**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits			
C10-C28	1600	1550		ug/L		97	56 - 127			
Surrogate	%Recovery	Qualifier	Limits							
<i>n</i> -Octacosane (Surr)	112		60 - 130							

**Lab Sample ID: LCSD 570-497002/3-A**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
C10-C28	1600	1510		ug/L		95	56 - 127	2	23	
Surrogate	%Recovery	Qualifier	Limits							
<i>n</i> -Octacosane (Surr)	109		60 - 130							

**Lab Sample ID: MRL 570-497002/4-A**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	Limits			
C10-C28	0.0200	0.0347	^3+	mg/L		173	50 - 150			
Surrogate	%Recovery	Qualifier	Limits							
<i>n</i> -Octacosane (Surr)	109		60 - 130							

**Lab Sample ID: 380-119304-C-1-A MS**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	
C10-C28	<26	^3+	1650	1590		ug/L		96	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
<i>n</i> -Octacosane (Surr)	108		60 - 130							

# QC Sample Results

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

Job ID: 380-119253-1  
 SDG: Site J

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

**Lab Sample ID: 380-119304-C-1-B MSD**  
**Matrix: Water**  
**Analysis Batch: 499795**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 497002**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C10-C28	<26	^3+	1660	1580		ug/L		96	70 - 130	1	20
<b>Surrogate</b>		<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>							
<i>n-Octacosane (Surr)</i>		109		60 - 130							

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# QC Association Summary

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

Job ID: 380-119253-1  
SDG: Site J

## GC/MS VOA

### Analysis Batch: 497411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8260B	
380-119253-2	BWS2253-J1-TB	Total/NA	Drinking Water	8260B	
MB 570-497411/6	Method Blank	Total/NA	Water	8260B	
LCS 570-497411/1003	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-497411/4	Lab Control Sample Dup	Total/NA	Water	8260B	

## GC/MS Semi VOA

### Prep Batch: 496453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	625.1	
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1	
LCS 570-496453/2-A	Lab Control Sample	Total/NA	Water	625.1	
LCSD 570-496453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1	
380-119304-A-1-A MS	Matrix Spike	Total/NA	Water	625.1	
380-119304-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1	

### Analysis Batch: 498190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1 SIM	496453
LCS 570-496453/2-A	Lab Control Sample	Total/NA	Water	625.1 SIM	496453
LCSD 570-496453/3-A	Lab Control Sample Dup	Total/NA	Water	625.1 SIM	496453

### Analysis Batch: 499085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	625.1 SIM	496453
380-119304-A-1-A MS	Matrix Spike	Total/NA	Water	625.1 SIM	496453
380-119304-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	625.1 SIM	496453

### Analysis Batch: 500626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	625.1	496453
MB 570-496453/1-A	Method Blank	Total/NA	Water	625.1	496453

## GC VOA

### Analysis Batch: 498920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8015B GRO LL	
380-119253-2	BWS2253-J1-TB	Total/NA	Drinking Water	8015B GRO LL	
MB 570-498920/6	Method Blank	Total/NA	Water	8015B GRO LL	
LCS 570-498920/4	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 570-498920/5	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MRL 570-498920/3	Lab Control Sample	Total/NA	Water	8015B GRO LL	

## GC Semi VOA

### Prep Batch: 497002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	3510C	
MB 570-497002/1-A	Method Blank	Total/NA	Water	3510C	
LCS 570-497002/2-A	Lab Control Sample	Total/NA	Water	3510C	

Eurofins Eaton Analytical Pomona

# QC Association Summary

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

Job ID: 380-119253-1  
 SDG: Site J

## GC Semi VOA (Continued)

### Prep Batch: 497002 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-497002/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MRL 570-497002/4-A	Lab Control Sample	Total/NA	Water	3510C	
380-119304-C-1-A MS	Matrix Spike	Total/NA	Water	3510C	
380-119304-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	3510C	

### Analysis Batch: 499795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-119253-1	BWS2253-J1-AQ	Total/NA	Drinking Water	8015B	497002
MB 570-497002/1-A	Method Blank	Total/NA	Water	8015B	497002
LCS 570-497002/2-A	Lab Control Sample	Total/NA	Water	8015B	497002
LCSD 570-497002/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	497002
MRL 570-497002/4-A	Lab Control Sample	Total/NA	Water	8015B	497002
380-119304-C-1-A MS	Matrix Spike	Total/NA	Water	8015B	497002
380-119304-C-1-B MSD	Matrix Spike Duplicate	Total/NA	Water	8015B	497002

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# Lab Chronicle

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

Job ID: 380-119253-1  
 SDG: Site J

**Client Sample ID: BWS2253-J1-AQ**

**Lab Sample ID: 380-119253-1**

**Date Collected: 10/23/24 13:15**

**Matrix: Drinking Water**

**Date Received: 10/24/24 10:24**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	497411	PT	EET CAL 4	10/31/24 01:09
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/29/24 11:47
Total/NA	Analysis	625.1		1	500626	J7WE	EET CAL 4	11/07/24 20:15
Total/NA	Prep	625.1			496453	H1SH	EET CAL 4	10/29/24 11:47
Total/NA	Analysis	625.1 SIM		1	499085	PQS1	EET CAL 4	11/04/24 18:37
Total/NA	Analysis	8015B GRO LL		1	498920	A9VE	EET CAL 4	11/04/24 16:37
Total/NA	Prep	3510C			497002	H6FE	EET CAL 4	10/29/24 15:19
Total/NA	Analysis	8015B		1	499795	E5RH	EET CAL 4	11/06/24 14:43

**Client Sample ID: BWS2253-J1-TB**

**Lab Sample ID: 380-119253-2**

**Date Collected: 10/23/24 13:15**

**Matrix: Drinking Water**

**Date Received: 10/24/24 10:24**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260B		1	497411	PT	EET CAL 4	10/30/24 22:08
Total/NA	Analysis	8015B GRO LL		1	498920	A9VE	EET CAL 4	11/04/24 17:24

**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: 380-119253-1  
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	11-15-24
Arkansas DEQ	State	88-0161	07-02-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-24
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-25
Nevada	State	CA00111	07-31-25
Oregon	NELAP	4175	02-02-25
USDA	US Federal Programs	P330-22-00059	06-08-26
Washington	State	C916-18	12-31-24

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# Method Summary

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

Job ID: 380-119253-1  
SDG: Site J

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	EET CAL 4
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
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:

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: 380-119253-1  
SDG: Site J

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-119253-1	BWS2253-J1-AQ	Drinking Water	10/23/24 13:15	10/24/24 10:24
380-119253-2	BWS2253-J1-TB	Drinking Water	10/23/24 13:15	10/24/24 10:24

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# Chain of Custody Record

<b>Client Information</b>		Sampler: N Mattner/J Joseph		Lab PM: Arada Rachelle		Carrier Tracking No(s):		COC No.:	
Client Contact: Mr Erwin Kawata		Phone: 858-205-0730		E-Mail: Rachelle.Arada@et.eurofins.com		State of Origin: Hawaii		Page: Page 1 of 1	
Company: City & County of Honolulu		Address: 630 South Beretania Street		City: Honolulu		State: HI		Zip: 96843	
Phone: 808-748-5066(Tel)		Email: ekawata@hbws.org		Project #: HRS-340E - RED-HILL - INTERA		Site: Site J		Job #:	
Due Date Requested:		TAT Requested (days): Standard		Compliance Project: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		PO #: C20525101 exp 05312023		WO #:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Preservation Code	
BWS2253-J1-AQ						G		Water	
BWS2253-J1-TB						G		Water	
BWS2253-J1-FB						G		Water	
Possible Hazard Identification		<input checked="" type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
Deliverable Requested I, II, III, IV Other (specify)		Empty Kit Relinquished by:		Date:		Time:		Method of Shipment: FEDEX Priority Overnight	
Relinquished by: Natalie Mattner		Date/Time: 10/23/2024 1430		Company: INTERA Inc		Received by: [Signature]		Date/Time: 10/24/2024 10:24	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No:		Cooler Temperature(s) °C and Other Remarks: 751A 0.8° 0.0° 0.8° FEDEX PRIORITY		Special Instructions/QC Requirements: FEDEX 2810 0240 2028		Archive For: Months	





## Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-119253-1

SDG Number: Site J

**Login Number: 119253**

**List Number: 1**

**Creator: Do, Michelle**

**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.	False	TB: no sample date/time, logged per SOP
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: 380-119253-1

SDG Number: Site J

**Login Number: 119253**

**List Number: 2**

**Creator: Skinner, Alma D**

**List Source: Eurofins Calscience**

**List Creation: 10/25/24 05:34 PM**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

