eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Eaton Monrovia
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016
Tel: (626)386-1100

Laboratory Job ID: 380-1269-1
Client Project/Site: INTERA - Red-Hill-Incident

For:
City & County of Honolulu
630 South Beretania Street
Public Service Bldg. Room 308
Honolulu, Hawaii 96843

Attn: Mr. Erwin Kawata

Authorized for release by:
6/26/2022 2:42:16 PM

Debbie Frank, Project Manager
(626)386-1100
Debbie.Frank@et.eurofinsus.com

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)

Debbie Frank
Project Manager
6/26/2022 2:42:16 PM

Table of Contents

Definitions/Glossary

Client: City & County of Honolulu
Job ID: 380-1269-1
Project/Site: INTERA - Red-Hill-Incident

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Subcontract

Qualifier	Qualifier Description
U	This analyte was not detected.

Glossary

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

Job ID: 380-1269-1

Laboratory: Eurofins Eaton Monrovia

Narrative

Job Narrative
380-1269-1

Comments
No additional comments.

Receipt
The samples were received on 5/5/2022 11:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 3.6º C, 3.8º C, 4.4º C and 4.8º C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 570-233824 recovered above the upper control limit for Ethanol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: DH43-1 (380-1269-1), DH43-2 (380-1269-2), DH43-3 (380-1269-3), DH43-4 (380-1269-4), DH43-5 (380-1269-5), TRAVEL BLANK (380-1269-6) and (CCVIS 570-233824/3).

Method 8260B: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 570-233824 recovered outside control limits for the following analyte: Ethanol. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 570-233824 recovered outside control limits for the following analyte: Isopropyl alcohol. Laboratory control sample / laboratory control sample duplicate (LCS/LCSD) percent recovery is in control for affected analytes.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 570-233824 were outside control limits. Sample matrix interference is suspected.

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

Subcontract non-Sister
See attached subcontract report.

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

Subcontract Work
Methods 8015 GRO, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8, TPH 815 Diesel and Motor Oil: These methods were subcontracted to EMAX Laboratories Inc. The subcontract laboratory certifications are different from that of the facility issuing the final report.

8015 gas full QC See subs QC starting at page 64 of 144
8015 dro/mro full QC See subs QC starting at 91 of 144

Method 625 - PAH Only: This method was subcontracted to Physis Environmental Laboratories. The subcontract laboratory certification is different from that of the facility issuing the final report.

625 PAH QC See subs QC starting at page 118 of 144

Detection Summary

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

Job ID: 380-1269-1

Client Sample ID: DH43-1 — Lab Sample ID: 380-1269-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[e]pyrene	0.0103		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[g,h,i]perylene	0.00971		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Fluoranthene	0.00589		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Phenanthrene	0.00746		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Pyrene	0.00787		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
MOTOR OIL	0.43		0.052		mg/L	1		TPH 815 Diesel and Motor Oil	Total/NA

Client Sample ID: DH43-2 — Lab Sample ID: 380-1269-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.00947		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[e]pyrene	0.0399		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[g,h,i]perylene	0.0371		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[k]fluoranthene	0.0054		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Chrysene	0.0109		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Fluoranthene	0.00694		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Indeno[1,2,3-cd]pyrene	0.0129		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Phenanthrene	0.00696		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Pyrene	0.00999		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
MOTOR OIL	0.24		0.053		mg/L	1		TPH 815 Diesel and Motor Oil	Total/NA

Client Sample ID: DH43-3 — Lab Sample ID: 380-1269-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.00896		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[e]pyrene	0.0373		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[g,h,i]perylene	0.0337		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Chrysene	0.00978		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Fluoranthene	0.00502		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Indeno[1,2,3-cd]pyrene	0.013		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Phenanthrene	0.00559		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Pyrene	0.00758		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
MOTOR OIL	0.061		0.052		mg/L	1		TPH 815 Diesel and Motor Oil	Total/NA

Client Sample ID: DH43-4 — Lab Sample ID: 380-1269-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.0101		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[e]pyrene	0.0411		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[g,h,i]perylene	0.0377		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[k]fluoranthene	0.00564		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Chrysene	0.0112		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Fluoranthene	0.00578		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Indeno[1,2,3-cd]pyrene	0.0142		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Phenanthrene	0.00536		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Pyrene	0.00801		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
MOTOR OIL	0.061		0.051		mg/L	1		TPH 815 Diesel and Motor Oil	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 380-1269-1

Client Sample ID: DH43-5 — Lab Sample ID: 380-1269-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylphenanthrene	0.0109		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benz[a]anthracene	0.00536		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[a]pyrene	0.0191		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[b]fluoranthene	0.0533		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[e]pyrene	0.213		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[g,h,i]perylene	0.195		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Benzo[k]fluoranthene	0.0236		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Chrysene	0.0506		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Dibenz[a,h]anthracene	0.016		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Fluoranthene	0.0189		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Indeno[1,2,3-cd]pyrene	0.0782		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Naphthalene	0.00694		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Phenanthrene	0.0207		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA
Pyrene	0.0265		0.005	0.001	µg/L	1		625 - PAH Only	Total/NA

Client Sample ID: TRAVEL BLANK — Lab Sample ID: 380-1269-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 380-1269-1

Client Sample ID: DH43-1

Date Collected: 05/03/22 12:08
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-1

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 00:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 00:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 00:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 00:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 00:17	1
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 00:17	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 00:17	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 00:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 00:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 00:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 00:17	1
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 00:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:17	1
2-Butanone	ND		20		ug/L			05/13/22 00:17	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:17	1
2-Hexanone	ND		10		ug/L			05/13/22 00:17	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:17	1
Acetone	ND		20		ug/L			05/13/22 00:17	1
Benzene	ND		0.50		ug/L			05/13/22 00:17	1
Bromobenzene	ND		1.0		ug/L			05/13/22 00:17	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 00:17	1
Bromodichloromethane	ND		1.0		ug/L			05/13/22 00:17	1
Bromoform	ND		5.0		ug/L			05/13/22 00:17	1
Bromomethane	ND		25		ug/L			05/13/22 00:17	1
Carbon disulfide	ND		10		ug/L			05/13/22 00:17	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 00:17	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 00:17	1
Chloroethane	ND		5.0		ug/L			05/13/22 00:17	1
Chloroform	ND		1.0		ug/L			05/13/22 00:17	1
Chloromethane	ND		10		ug/L			05/13/22 00:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:17	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 00:17	1
Dibromomethane	ND		1.0		ug/L			05/13/22 00:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 00:17	1
Diethyl ether	ND		10		ug/L			05/13/22 00:17	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 00:17	1
Ethanol	ND	*+ F1	100		ug/L			05/13/22 00:17	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 00:17	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 00:17	1

Client Sample ID: DH43-1
Date Collected: 05/03/22 12:08
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-1
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 00:17	1
Hexane	ND		5.0		ug/L			05/13/22 00:17	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 00:17	1
Isopropanol	ND	*1	130		ug/L			05/13/22 00:17	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
m,p-Xylene	ND		2.0		ug/L			05/13/22 00:17	1
Methylene Chloride	ND		10		ug/L			05/13/22 00:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 00:17	1
MIBK	ND		10		ug/L			05/13/22 00:17	1
Naphthalene	ND		10		ug/L			05/13/22 00:17	1
n-Butylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
o-Xylene	ND		1.0		ug/L			05/13/22 00:17	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 00:17	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
Styrene	ND		1.0		ug/L			05/13/22 00:17	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 00:17	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 00:17	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 00:17	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 00:17	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 00:17	1
Toluene	ND		1.0		ug/L			05/13/22 00:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:17	1
Trichloroethene	ND		1.0		ug/L			05/13/22 00:17	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 00:17	1
Vinyl acetate	ND		10		ug/L			05/13/22 00:17	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 123*		*05/13/22 00:17*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/13/22 00:17*	*1*
Dibromofluoromethane (Surr)	*100*		*78 - 120*		*05/13/22 00:17*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/13/22 00:17*	*1*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Acenaphthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Benzo[e]pyrene	**0.0103**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Benzo[g,h,i]perylene	**0.00971**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1

Client Sample ID: DH43-1

Date Collected: 05/03/22 12:08
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-1

Matrix: Water

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Biphenyl	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Chrysene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Dibenzothiophene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/07/22 00:00	05/14/22 12:49	1
Fluoranthene	**0.00589**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Fluorene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Naphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Perylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Phenanthrene	**0.00746**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1
Pyrene	**0.00787**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*87*		*45 - 118*	*05/07/22 00:00*	*05/14/22 12:49*	*1*
(d10-Phenanthrene)	*93*		*56 - 123*	*05/07/22 00:00*	*05/14/22 12:49*	*1*
(d12-Chrysene)	*86*		*36 - 142*	*05/07/22 00:00*	*05/14/22 12:49*	*1*
(d12-Perylene)	*102*		*36 - 161*	*05/07/22 00:00*	*05/14/22 12:49*	*1*
(d8-Naphthalene)	*75*		*20 - 112*	*05/07/22 00:00*	*05/14/22 12:49*	*1*

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 01:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*92*		*60 - 140*		*05/07/22 01:55*	*1*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.026		mg/L			05/10/22 22:14	1
JP5	ND	U	0.052		mg/L			05/10/22 22:14	1
JP8	ND	U	0.052		mg/L			05/10/22 22:14	1
MOTOR OIL	**0.43**		0.052		mg/L			05/10/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*90*		*60 - 130*		*05/10/22 22:14*	*1*
HEXACOSANE	*106*		*60 - 130*		*05/10/22 22:14*	*1*

Client Sample ID: DH43-2

Date Collected: 05/03/22 13:45
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-2

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 00:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 00:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 00:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 00:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 00:37	1

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

Job ID: 380-1269-1

Client Sample ID: DH43-2
Date Collected: 05/03/22 13:45
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 00:37	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 00:37	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 00:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 00:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 00:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 00:37	1
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 00:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:37	1
2-Butanone	ND		20		ug/L			05/13/22 00:37	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:37	1
2-Hexanone	ND		10		ug/L			05/13/22 00:37	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:37	1
Acetone	ND		20		ug/L			05/13/22 00:37	1
Benzene	ND		0.50		ug/L			05/13/22 00:37	1
Bromobenzene	ND		1.0		ug/L			05/13/22 00:37	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 00:37	1
Bromodichloromethane	ND		1.0		ug/L			05/13/22 00:37	1
Bromoform	ND		5.0		ug/L			05/13/22 00:37	1
Bromomethane	ND		25		ug/L			05/13/22 00:37	1
Carbon disulfide	ND		10		ug/L			05/13/22 00:37	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 00:37	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 00:37	1
Chloroethane	ND		5.0		ug/L			05/13/22 00:37	1
Chloroform	ND		1.0		ug/L			05/13/22 00:37	1
Chloromethane	ND		10		ug/L			05/13/22 00:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:37	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:37	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 00:37	1
Dibromomethane	ND		1.0		ug/L			05/13/22 00:37	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 00:37	1
Diethyl ether	ND		10		ug/L			05/13/22 00:37	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 00:37	1
Ethanol	ND	*+	100		ug/L			05/13/22 00:37	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 00:37	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 00:37	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 00:37	1
Hexane	ND		5.0		ug/L			05/13/22 00:37	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 00:37	1
Isopropanol	ND	*1	130		ug/L			05/13/22 00:37	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 00:37	1

Client Sample ID: DH43-2
Date Collected: 05/03/22 13:45
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-2
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		2.0		ug/L			05/13/22 00:37	1
Methylene Chloride	ND		10		ug/L			05/13/22 00:37	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 00:37	1
MIBK	ND		10		ug/L			05/13/22 00:37	1
Naphthalene	ND		10		ug/L			05/13/22 00:37	1
n-Butylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
o-Xylene	ND		1.0		ug/L			05/13/22 00:37	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 00:37	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
Styrene	ND		1.0		ug/L			05/13/22 00:37	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 00:37	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 00:37	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 00:37	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 00:37	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 00:37	1
Toluene	ND		1.0		ug/L			05/13/22 00:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:37	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:37	1
Trichloroethene	ND		1.0		ug/L			05/13/22 00:37	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 00:37	1
Vinyl acetate	ND		10		ug/L			05/13/22 00:37	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 123*		*05/13/22 00:37*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*05/13/22 00:37*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 120*		*05/13/22 00:37*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/13/22 00:37*	*1*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Acenaphthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benzo[b]fluoranthene	**0.00947**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benzo[e]pyrene	**0.0399**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benzo[g,h,i]perylene	**0.0371**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Benzo[k]fluoranthene	**0.0054**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Biphenyl	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Chrysene	**0.0109**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1

Client Sample ID: DH43-2
Date Collected: 05/03/22 13:45
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-2
Matrix: Water

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzothiophene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/07/22 00:00	05/14/22 19:47	1
Fluoranthene	**0.00694**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Fluorene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Indeno[1,2,3-cd]pyrene	**0.0129**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Naphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Perylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Phenanthrene	**0.00696**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1
Pyrene	**0.00999**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*87*		*45 - 118*	*05/07/22 00:00*	*05/14/22 19:47*	*1*
(d10-Phenanthrene)	*96*		*56 - 123*	*05/07/22 00:00*	*05/14/22 19:47*	*1*
(d12-Chrysene)	*88*		*36 - 142*	*05/07/22 00:00*	*05/14/22 19:47*	*1*
(d12-Perylene)	*105*		*36 - 161*	*05/07/22 00:00*	*05/14/22 19:47*	*1*
(d8-Naphthalene)	*75*		*20 - 112*	*05/07/22 00:00*	*05/14/22 19:47*	*1*

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*92*		*60 - 140*		*05/07/22 03:37*	*1*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.027		mg/L			05/10/22 22:33	1
JP5	ND	U	0.053		mg/L			05/10/22 22:33	1
JP8	ND	U	0.053		mg/L			05/10/22 22:33	1
MOTOR OIL	**0.24**		0.053		mg/L			05/10/22 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*95*		*60 - 130*		*05/10/22 22:33*	*1*
HEXACOSANE	*101*		*60 - 130*		*05/10/22 22:33*	*1*

Client Sample ID: DH43-3
Date Collected: 05/03/22 15:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 00:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 00:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 00:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 00:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 00:57	1
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 00:57	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 00:57	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 00:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 00:57	1

Client Sample ID: DH43-3
Date Collected: 05/03/22 15:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 00:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 00:57	1
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 00:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 00:57	1
2-Butanone	ND		20		ug/L			05/13/22 00:57	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:57	1
2-Hexanone	ND		10		ug/L			05/13/22 00:57	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 00:57	1
Acetone	ND		20		ug/L			05/13/22 00:57	1
Benzene	ND		0.50		ug/L			05/13/22 00:57	1
Bromobenzene	ND		1.0		ug/L			05/13/22 00:57	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 00:57	1
Bromodichloromethane	ND		1.0		ug/L			05/13/22 00:57	1
Bromoform	ND		5.0		ug/L			05/13/22 00:57	1
Bromomethane	ND		25		ug/L			05/13/22 00:57	1
Carbon disulfide	ND		10		ug/L			05/13/22 00:57	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 00:57	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 00:57	1
Chloroethane	ND		5.0		ug/L			05/13/22 00:57	1
Chloroform	ND		1.0		ug/L			05/13/22 00:57	1
Chloromethane	ND		10		ug/L			05/13/22 00:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:57	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:57	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 00:57	1
Dibromomethane	ND		1.0		ug/L			05/13/22 00:57	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 00:57	1
Diethyl ether	ND		10		ug/L			05/13/22 00:57	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 00:57	1
Ethanol	ND	*+	100		ug/L			05/13/22 00:57	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 00:57	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 00:57	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 00:57	1
Hexane	ND		5.0		ug/L			05/13/22 00:57	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 00:57	1
Isopropanol	ND	*1	130		ug/L			05/13/22 00:57	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
m,p-Xylene	ND		2.0		ug/L			05/13/22 00:57	1
Methylene Chloride	ND		10		ug/L			05/13/22 00:57	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 00:57	1
MIBK	ND		10		ug/L			05/13/22 00:57	1
Naphthalene	ND		10		ug/L			05/13/22 00:57	1

Client Sample ID: DH43-3
Date Collected: 05/03/22 15:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-3
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
o-Xylene	ND		1.0		ug/L			05/13/22 00:57	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 00:57	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
Styrene	ND		1.0		ug/L			05/13/22 00:57	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 00:57	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 00:57	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 00:57	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 00:57	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 00:57	1
Toluene	ND		1.0		ug/L			05/13/22 00:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 00:57	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 00:57	1
Trichloroethene	ND		1.0		ug/L			05/13/22 00:57	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 00:57	1
Vinyl acetate	ND		10		ug/L			05/13/22 00:57	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 123*		*05/13/22 00:57*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/13/22 00:57*	*1*
Dibromofluoromethane (Surr)	*103*		*78 - 120*		*05/13/22 00:57*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/13/22 00:57*	*1*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Acenaphthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benzo[b]fluoranthene	**0.00896**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benzo[e]pyrene	**0.0373**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benzo[g,h,i]perylene	**0.0337**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Biphenyl	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Chrysene	**0.00978**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Dibenzothiophene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/07/22 00:00	05/14/22 21:30	1
Fluoranthene	**0.00502**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Fluorene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Indeno[1,2,3-cd]pyrene	**0.013**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1

Client Sample ID: DH43-3

Date Collected: 05/03/22 15:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-3

Matrix: Water

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Perylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Phenanthrene	**0.00559**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1
Pyrene	**0.00758**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*89*		*45 - 118*	*05/07/22 00:00*	*05/14/22 21:30*	*1*
(d10-Phenanthrene)	*95*		*56 - 123*	*05/07/22 00:00*	*05/14/22 21:30*	*1*
(d12-Chrysene)	*88*		*36 - 142*	*05/07/22 00:00*	*05/14/22 21:30*	*1*
(d12-Perylene)	*106*		*36 - 161*	*05/07/22 00:00*	*05/14/22 21:30*	*1*
(d8-Naphthalene)	*78*		*20 - 112*	*05/07/22 00:00*	*05/14/22 21:30*	*1*

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 04:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*90*		*60 - 140*		*05/07/22 04:11*	*1*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.026		mg/L			05/10/22 22:51	1
JP5	ND	U	0.052		mg/L			05/10/22 22:51	1
JP8	ND	U	0.052		mg/L			05/10/22 22:51	1
MOTOR OIL	**0.061**		0.052		mg/L			05/10/22 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*88*		*60 - 130*		*05/10/22 22:51*	*1*
HEXACOSANE	*103*		*60 - 130*		*05/10/22 22:51*	*1*

Client Sample ID: DH43-4

Date Collected: 05/03/22 16:15
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-4

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 01:17	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 01:17	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 01:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 01:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 01:17	1
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 01:17	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 01:17	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 01:17	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 01:17	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 01:17	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 01:17	1

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

Job ID: 380-1269-1

Client Sample ID: DH43-4
Date Collected: 05/03/22 16:15
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:17	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 01:17	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:17	1
2-Butanone	ND		20		ug/L			05/13/22 01:17	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:17	1
2-Hexanone	ND		10		ug/L			05/13/22 01:17	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:17	1
Acetone	ND		20		ug/L			05/13/22 01:17	1
Benzene	ND		0.50		ug/L			05/13/22 01:17	1
Bromobenzene	ND		1.0		ug/L			05/13/22 01:17	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 01:17	1
Bromodichloromethane	ND		1.0		ug/L			05/13/22 01:17	1
Bromoform	ND		5.0		ug/L			05/13/22 01:17	1
Bromomethane	ND		25		ug/L			05/13/22 01:17	1
Carbon disulfide	ND		10		ug/L			05/13/22 01:17	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 01:17	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 01:17	1
Chloroethane	ND		5.0		ug/L			05/13/22 01:17	1
Chloroform	ND		1.0		ug/L			05/13/22 01:17	1
Chloromethane	ND		10		ug/L			05/13/22 01:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:17	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:17	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 01:17	1
Dibromomethane	ND		1.0		ug/L			05/13/22 01:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 01:17	1
Diethyl ether	ND		10		ug/L			05/13/22 01:17	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 01:17	1
Ethanol	ND	*+	100		ug/L			05/13/22 01:17	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 01:17	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 01:17	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 01:17	1
Hexane	ND		5.0		ug/L			05/13/22 01:17	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 01:17	1
Isopropanol	ND	*1	130		ug/L			05/13/22 01:17	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
m,p-Xylene	ND		2.0		ug/L			05/13/22 01:17	1
Methylene Chloride	ND		10		ug/L			05/13/22 01:17	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 01:17	1
MIBK	ND		10		ug/L			05/13/22 01:17	1
Naphthalene	ND		10		ug/L			05/13/22 01:17	1
n-Butylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
o-Xylene	ND		1.0		ug/L			05/13/22 01:17	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 01:17	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 01:17	1

Client Sample ID: DH43-4
Date Collected: 05/03/22 16:15
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-4
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0		ug/L			05/13/22 01:17	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 01:17	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 01:17	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 01:17	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 01:17	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 01:17	1
Toluene	ND		1.0		ug/L			05/13/22 01:17	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:17	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:17	1
Trichloroethene	ND		1.0		ug/L			05/13/22 01:17	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 01:17	1
Vinyl acetate	ND		10		ug/L			05/13/22 01:17	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 123*		*05/13/22 01:17*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/13/22 01:17*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 120*		*05/13/22 01:17*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/13/22 01:17*	*1*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Acenaphthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benzo[b]fluoranthene	**0.0101**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benzo[e]pyrene	**0.0411**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benzo[g,h,i]perylene	**0.0377**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Benzo[k]fluoranthene	**0.00564**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Biphenyl	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Chrysene	**0.0112**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Dibenzothiophene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/07/22 00:00	05/14/22 23:14	1
Fluoranthene	**0.00578**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Fluorene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Indeno[1,2,3-cd]pyrene	**0.0142**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Naphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Perylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Phenanthrene	**0.00536**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1
Pyrene	**0.00801**		0.005	0.001	µg/L		05/07/22 00:00	05/14/22 23:14	1

Client Sample ID: DH43-4

Date Collected: 05/03/22 16:15
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*87*		*45 - 118*	*05/07/22 00:00*	*05/14/22 23:14*	*1*
(d10-Phenanthrene)	*92*		*56 - 123*	*05/07/22 00:00*	*05/14/22 23:14*	*1*
(d12-Chrysene)	*85*		*36 - 142*	*05/07/22 00:00*	*05/14/22 23:14*	*1*
(d12-Perylene)	*102*		*36 - 161*	*05/07/22 00:00*	*05/14/22 23:14*	*1*
(d8-Naphthalene)	*74*		*20 - 112*	*05/07/22 00:00*	*05/14/22 23:14*	*1*

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*92*		*60 - 140*		*05/07/22 04:45*	*1*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.025		mg/L			05/10/22 23:09	1
JP5	ND	U	0.051		mg/L			05/10/22 23:09	1
JP8	ND	U	0.051		mg/L			05/10/22 23:09	1
MOTOR OIL	**0.061**		0.051		mg/L			05/10/22 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*94*		*60 - 130*		*05/10/22 23:09*	*1*
HEXACOSANE	*107*		*60 - 130*		*05/10/22 23:09*	*1*

Client Sample ID: DH43-5

Date Collected: 05/03/22 16:50
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-5

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 01:37	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 01:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 01:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 01:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 01:37	1
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 01:37	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 01:37	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 01:37	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 01:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 01:37	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 01:37	1
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:37	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 01:37	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:37	1

Client Sample ID: DH43-5
Date Collected: 05/03/22 16:50
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-5
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone	ND		20		ug/L			05/13/22 01:37	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:37	1
2-Hexanone	ND		10		ug/L			05/13/22 01:37	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:37	1
Acetone	ND		20		ug/L			05/13/22 01:37	1
Benzene	ND		0.50		ug/L			05/13/22 01:37	1
Bromobenzene	ND		1.0		ug/L			05/13/22 01:37	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 01:37	1
Bromodichloromethane	ND		1.0		ug/L			05/13/22 01:37	1
Bromoform	ND		5.0		ug/L			05/13/22 01:37	1
Bromomethane	ND		25		ug/L			05/13/22 01:37	1
Carbon disulfide	ND		10		ug/L			05/13/22 01:37	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 01:37	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 01:37	1
Chloroethane	ND		5.0		ug/L			05/13/22 01:37	1
Chloroform	ND		1.0		ug/L			05/13/22 01:37	1
Chloromethane	ND		10		ug/L			05/13/22 01:37	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:37	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:37	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 01:37	1
Dibromomethane	ND		1.0		ug/L			05/13/22 01:37	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 01:37	1
Diethyl ether	ND		10		ug/L			05/13/22 01:37	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 01:37	1
Ethanol	ND	*+	100		ug/L			05/13/22 01:37	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 01:37	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 01:37	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 01:37	1
Hexane	ND		5.0		ug/L			05/13/22 01:37	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 01:37	1
Isopropanol	ND	*1	130		ug/L			05/13/22 01:37	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
m,p-Xylene	ND		2.0		ug/L			05/13/22 01:37	1
Methylene Chloride	ND		10		ug/L			05/13/22 01:37	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 01:37	1
MIBK	ND		10		ug/L			05/13/22 01:37	1
Naphthalene	ND		10		ug/L			05/13/22 01:37	1
n-Butylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
o-Xylene	ND		1.0		ug/L			05/13/22 01:37	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 01:37	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
Styrene	ND		1.0		ug/L			05/13/22 01:37	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 01:37	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 01:37	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 01:37	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 01:37	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 01:37	1

Client Sample ID: DH43-5
Date Collected: 05/03/22 16:50
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-5
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0		ug/L			05/13/22 01:37	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:37	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:37	1
Trichloroethene	ND		1.0		ug/L			05/13/22 01:37	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 01:37	1
Vinyl acetate	ND		10		ug/L			05/13/22 01:37	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 123*		*05/13/22 01:37*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*05/13/22 01:37*	*1*
Dibromofluoromethane (Surr)	*101*		*78 - 120*		*05/13/22 01:37*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/13/22 01:37*	*1*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
1-Methylphenanthrene	**0.0109**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Acenaphthene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Anthracene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benz[a]anthracene	**0.00536**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benzo[a]pyrene	**0.0191**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benzo[b]fluoranthene	**0.0533**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benzo[e]pyrene	**0.213**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benzo[g,h,i]perylene	**0.195**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Benzo[k]fluoranthene	**0.0236**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Biphenyl	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Chrysene	**0.0506**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Dibenz[a,h]anthracene	**0.016**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Dibenzothiophene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/07/22 00:00	05/15/22 00:57	1
Fluoranthene	**0.0189**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Fluorene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Indeno[1,2,3-cd]pyrene	**0.0782**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Naphthalene	**0.00694**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Perylene	ND		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Phenanthrene	**0.0207**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1
Pyrene	**0.0265**		0.005	0.001	µg/L		05/07/22 00:00	05/15/22 00:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*87*		*45 - 118*	*05/07/22 00:00*	*05/15/22 00:57*	*1*
(d10-Phenanthrene)	*93*		*56 - 123*	*05/07/22 00:00*	*05/15/22 00:57*	*1*
(d12-Chrysene)	*89*		*36 - 142*	*05/07/22 00:00*	*05/15/22 00:57*	*1*
(d12-Perylene)	*103*		*36 - 161*	*05/07/22 00:00*	*05/15/22 00:57*	*1*
(d8-Naphthalene)	*74*		*20 - 112*	*05/07/22 00:00*	*05/15/22 00:57*	*1*

Client Sample ID: DH43-5

Date Collected: 05/03/22 16:50
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-5

Matrix: Water

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 05:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE	*97*		*60 - 140*		*05/07/22 05:19*	*1*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.027		mg/L			05/10/22 23:28	1
JP5	ND	U	0.054		mg/L			05/10/22 23:28	1
JP8	ND	U	0.054		mg/L			05/10/22 23:28	1
MOTOR OIL	ND	U	0.054		mg/L			05/10/22 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE	*97*		*60 - 130*		*05/10/22 23:28*	*1*
HEXACOSANE	*104*		*60 - 130*		*05/10/22 23:28*	*1*

Client Sample ID: TRAVEL BLANK

Date Collected: 05/03/22 00:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-6

Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			05/13/22 01:57	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/13/22 01:57	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/13/22 01:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/13/22 01:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/13/22 01:57	1
1,1-Dichloroethane	ND		1.0		ug/L			05/13/22 01:57	1
1,1-Dichloroethene	ND		1.0		ug/L			05/13/22 01:57	1
1,1-Dichloropropene	ND		1.0		ug/L			05/13/22 01:57	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/13/22 01:57	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/13/22 01:57	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,2-Dichloroethane	ND		0.50		ug/L			05/13/22 01:57	1
1,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:57	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
1,3-Dichloropropane	ND		1.0		ug/L			05/13/22 01:57	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
2,2-Dichloropropane	ND		1.0		ug/L			05/13/22 01:57	1
2-Butanone	ND		20		ug/L			05/13/22 01:57	1
2-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:57	1
2-Hexanone	ND		10		ug/L			05/13/22 01:57	1
4-Chlorotoluene	ND		1.0		ug/L			05/13/22 01:57	1
Acetone	ND		20		ug/L			05/13/22 01:57	1
Benzene	ND		0.50		ug/L			05/13/22 01:57	1
Bromobenzene	ND		1.0		ug/L			05/13/22 01:57	1
Bromochloromethane	ND		2.0		ug/L			05/13/22 01:57	1

Client Sample ID: TRAVEL BLANK
Date Collected: 05/03/22 00:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-6
Matrix: Water

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0		ug/L			05/13/22 01:57	1
Bromoform	ND		5.0		ug/L			05/13/22 01:57	1
Bromomethane	ND		25		ug/L			05/13/22 01:57	1
Carbon disulfide	ND		10		ug/L			05/13/22 01:57	1
Carbon tetrachloride	ND		0.50		ug/L			05/13/22 01:57	1
Chlorobenzene	ND		1.0		ug/L			05/13/22 01:57	1
Chloroethane	ND		5.0		ug/L			05/13/22 01:57	1
Chloroform	ND		1.0		ug/L			05/13/22 01:57	1
Chloromethane	ND		10		ug/L			05/13/22 01:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:57	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:57	1
Dibromochloromethane	ND		2.0		ug/L			05/13/22 01:57	1
Dibromomethane	ND		1.0		ug/L			05/13/22 01:57	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/13/22 01:57	1
Diethyl ether	ND		10		ug/L			05/13/22 01:57	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/13/22 01:57	1
Ethanol	ND	*+	100		ug/L			05/13/22 01:57	1
Ethylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
Ethylene Dibromide	ND		1.0		ug/L			05/13/22 01:57	1
Ethyl-t-butyl ether (ETBE)	ND		2.0		ug/L			05/13/22 01:57	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/13/22 01:57	1
Hexane	ND		5.0		ug/L			05/13/22 01:57	1
Isobutyl alcohol	ND		100		ug/L			05/13/22 01:57	1
Isopropanol	ND	*1	130		ug/L			05/13/22 01:57	1
Isopropylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
m,p-Xylene	ND		2.0		ug/L			05/13/22 01:57	1
Methylene Chloride	ND		10		ug/L			05/13/22 01:57	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/13/22 01:57	1
MIBK	ND		10		ug/L			05/13/22 01:57	1
Naphthalene	ND		10		ug/L			05/13/22 01:57	1
n-Butylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
N-Propylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
o-Xylene	ND		1.0		ug/L			05/13/22 01:57	1
p-Isopropyltoluene	ND		1.0		ug/L			05/13/22 01:57	1
sec-Butylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
Styrene	ND		1.0		ug/L			05/13/22 01:57	1
tert-Amyl alcohol	ND		50		ug/L			05/13/22 01:57	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/13/22 01:57	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/13/22 01:57	1
tert-Butylbenzene	ND		1.0		ug/L			05/13/22 01:57	1
Tetrachloroethene	ND		1.0		ug/L			05/13/22 01:57	1
Toluene	ND		1.0		ug/L			05/13/22 01:57	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/13/22 01:57	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/13/22 01:57	1
Trichloroethene	ND		1.0		ug/L			05/13/22 01:57	1
Trichlorofluoromethane	ND		10		ug/L			05/13/22 01:57	1
Vinyl acetate	ND		10		ug/L			05/13/22 01:57	1
Vinyl chloride	ND		0.50		ug/L			05/13/22 01:57	1

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

Job ID: 380-1269-1

Client Sample ID: TRAVEL BLANK

Date Collected: 05/03/22 00:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-6

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		70 - 123		05/13/22 01:57	1
4-Bromofluorobenzene (Surr)	92		80 - 120		05/13/22 01:57	1
Dibromofluoromethane (Surr)	102		78 - 120		05/13/22 01:57	1
Toluene-d8 (Surr)	104		80 - 120		05/13/22 01:57	1

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/07/22 05:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
BROMOFLUOROBENZENE	93		60 - 140		05/07/22 05:53	1

Action Limit Summary

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

Job ID: 380-1269-1

Client Sample ID: DH43-1 — Lab Sample ID: 380-1269-1

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

Client Sample ID: DH43-2 — Lab Sample ID: 380-1269-2

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

Client Sample ID: DH43-2 (Continued) — Lab Sample ID: 380-1269-2

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
Tetrachloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Toluene	ND		ug/L	1000	1000	1.0	8260B	Total/NA
trans-1,2-Dichloroethene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
Trichloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Vinyl chloride	ND		ug/L	2	2.000	0.50	8260B	Total/NA

Client Sample ID: DH43-3 — Lab Sample ID: 380-1269-3

Compliance Check

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

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

Client Sample ID: DH43-4 — Lab Sample ID: 380-1269-4

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	ND		ug/L	200	200.0	1.0	8260B	Total/NA
1,1,2-Trichloroethane	ND		ug/L	5	5.000	1.0	8260B	Total/NA
1,1-Dichloroethene	ND		ug/L	7	7.000	1.0	8260B	Total/NA
1,2,3-Trichloropropane	ND		ug/L		0.6000	5.0	8260B	Total/NA
1,2,4-Trichlorobenzene	ND		ug/L	70	70.00	1.0	8260B	Total/NA
1,2-Dibromo-3-Chloropropane	ND		ug/L	0.2		10	8260B	Total/NA

Client Sample ID: DH43-4 (Continued)

Lab Sample ID: 380-1269-4

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
1,2-Dichlorobenzene	ND		ug/L	600	600.0	1.0	8260B	Total/NA
1,2-Dichloroethane	ND		ug/L	5	5.000	0.50	8260B	Total/NA
1,2-Dichloropropane	ND		ug/L	5	5.000	1.0	8260B	Total/NA
1,4-Dichlorobenzene	ND		ug/L	75	75.000	1.0	8260B	Total/NA
Benzene	ND		ug/L	5	5.000	0.50	8260B	Total/NA
Carbon tetrachloride	ND		ug/L	5	5.000	0.50	8260B	Total/NA
Chlorobenzene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
cis-1,2-Dichloroethene	ND		ug/L	70	70.00	1.0	8260B	Total/NA
Ethylbenzene	ND		ug/L	700	700.0	1.0	8260B	Total/NA
Ethylene Dibromide	ND		ug/L	0.05		1.0	8260B	Total/NA
Methylene Chloride	ND		ug/L	5	5.000	10	8260B	Total/NA
Styrene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
Tetrachloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Toluene	ND		ug/L	1000	1000	1.0	8260B	Total/NA
trans-1,2-Dichloroethene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
Trichloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Vinyl chloride	ND		ug/L	2	2.000	0.50	8260B	Total/NA

Client Sample ID: DH43-5

Lab Sample ID: 380-1269-5

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

Action Limit Summary

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

Job ID: 380-1269-1

Client Sample ID: TRAVEL BLANK

Lab Sample ID: 380-1269-6

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	ND		ug/L	200	200.0	1.0	8260B	Total/NA
1,1,2-Trichloroethane	ND		ug/L	5	5.000	1.0	8260B	Total/NA
1,1-Dichloroethene	ND		ug/L	7	7.000	1.0	8260B	Total/NA
1,2,3-Trichloropropane	ND		ug/L		0.6000	5.0	8260B	Total/NA
1,2,4-Trichlorobenzene	ND		ug/L	70	70.00	1.0	8260B	Total/NA
1,2-Dibromo-3-Chloropropane	ND		ug/L	0.2		10	8260B	Total/NA
1,2-Dichlorobenzene	ND		ug/L	600	600.0	1.0	8260B	Total/NA
1,2-Dichloroethane	ND		ug/L	5	5.000	0.50	8260B	Total/NA
1,2-Dichloropropane	ND		ug/L	5	5.000	1.0	8260B	Total/NA
1,4-Dichlorobenzene	ND		ug/L	75	75.000	1.0	8260B	Total/NA
Benzene	ND		ug/L	5	5.000	0.50	8260B	Total/NA
Carbon tetrachloride	ND		ug/L	5	5.000	0.50	8260B	Total/NA
Chlorobenzene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
cis-1,2-Dichloroethene	ND		ug/L	70	70.00	1.0	8260B	Total/NA
Ethylbenzene	ND		ug/L	700	700.0	1.0	8260B	Total/NA
Ethylene Dibromide	ND		ug/L	0.05		1.0	8260B	Total/NA
Methylene Chloride	ND		ug/L	5	5.000	10	8260B	Total/NA
Styrene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
Tetrachloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Toluene	ND		ug/L	1000	1000	1.0	8260B	Total/NA
trans-1,2-Dichloroethene	ND		ug/L	100	100.0	1.0	8260B	Total/NA
Trichloroethene	ND		ug/L	5	5.000	1.0	8260B	Total/NA
Vinyl chloride	ND		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: 380-1269-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(70-123)	(80-120)	(78-120)	(80-120)
380-1269-1	DH43-1	97	91	100	102
380-1269-1 MS	DH43-1	100	96	100	101
380-1269-1 MSD	DH43-1	97	97	98	100
380-1269-2	DH43-2	101	94	103	102
380-1269-3	DH43-3	100	91	103	102
380-1269-4	DH43-4	98	91	101	102
380-1269-5	DH43-5	95	93	101	103
380-1269-6	TRAVEL BLANK	93	92	102	104
LCS 570-233824/4	Lab Control Sample	93	99	98	101
LCSD 570-233824/5	Lab Control Sample Dup	90	98	94	100
MB 570-233824/8	Method Blank	92	91	99	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

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

		Percent Surrogate Recovery (Acceptance Limits)				
		ANT	CRY	NPT	PHN	PRY
Lab Sample ID	Client Sample ID	(65-113)	(60-139)	(44-119)	(80-111)	(36-161)
96783-B1	Method Blank	91	93	84	95	89
96783-BS1	Lab Control Sample	96	97	89	97	94
96783-BS2	Lab Control Sample Dup	91	93	82	93	91

Surrogate Legend

ANT = (d10-Acenaphthene)
CRY = (d12-Chrysene)
NPT = (d8-Naphthalene)
PHN = (d10-Phenanthrene)
PRY = (d12-Perylene)

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

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

		Percent Surrogate Recovery (Acceptance Limits)				
		ANT	CRY	NPT	PHN	PRY
Lab Sample ID	Client Sample ID	(45-118)	(36-142)	(20-112)	(56-123)	(36-161)
380-1269-1	DH43-1	87	86	75	93	102
380-1269-1 MS	DH43-1	83	85	72	90	99
380-1269-1 MSD	DH43-1	85	88	73	94	104
380-1269-2	DH43-2	87	88	75	96	105
380-1269-3	DH43-3	89	88	78	95	106
380-1269-4	DH43-4	87	85	74	92	102
380-1269-5	DH43-5	87	89	74	93	103

Surrogate Legend

ANT = (d10-Acenaphthene)
CRY = (d12-Chrysene)

Surrogate Summary

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

Job ID: 380-1269-1

NPT = (d8-Naphthalene)
PHN = (d10-Phenanthrene)
PRY = (d12-Perylene)

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(60-140)
380-1269-1	DH43-1	92
380-1269-1 MSD	DH43-1	108
380-1269-2	DH43-2	92
380-1269-3	DH43-3	90
380-1269-4	DH43-4	92
380-1269-5	DH43-5	97
380-1269-6	TRAVEL BLANK	93

Surrogate Legend
BFB = BROMOFLUOROBENZENE

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	
22VGH7E03B	Method Blank	

Surrogate Legend
BFB = BROMOFLUOROBENZENE

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

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

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(70-130)
22VGH7E03C	LCD	116
22VGH7E03L	Lab Control Sample	118

Surrogate Legend
BFB = BROMOFLUOROBENZENE

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BB	XACOSA
Lab Sample ID	Client Sample ID	(60-130)	(60-130)
380-1269-1	DH43-1	90	106
380-1269-2	DH43-2	95	101
380-1269-3	DH43-3	88	103
380-1269-4	DH43-4	94	107
380-1269-5	DH43-5	97	104

Surrogate Legend
BB = BROMOBENZENE
HEXACOSANE = HEXACOSANE

Surrogate Summary

Client: City & County of Honolulu
Job ID: 380-1269-1
Project/Site: INTERA - Red-Hill-Incident

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(60-140)								
380-1269-1 MS	DH43-1	107								

Surrogate Legend

BFB = BROMOFLUOROBENZENE

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)								
		BB	XACOSA							
Lab Sample ID	Client Sample ID									
22DSE013WB	Method Blank									

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

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

		Percent Surrogate Recovery (Acceptance Limits)								
		BB	XACOSA							
Lab Sample ID	Client Sample ID	(60-130)	(60-130)							
22DSE013WL	Lab Control Sample	104	102							
22J5E013WL	Lab Control Sample	108	100							
22J8E013WL	Lab Control Sample	101	103							

Surrogate Legend

BB = BROMOBENZENE

HEXACOSANE = HEXACOSANE

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

Lab Sample ID: MB 570-233824/8
Matrix: Water
Analysis Batch: 233824

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	ND		2.0		ug/L			05/12/22 23:36	1
1,1,1-Trichloroethane	ND		1.0		ug/L			05/12/22 23:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			05/12/22 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10		ug/L			05/12/22 23:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			05/12/22 23:36	1
1,1-Dichloroethane	ND		1.0		ug/L			05/12/22 23:36	1
1,1-Dichloroethene	ND		1.0		ug/L			05/12/22 23:36	1
1,1-Dichloropropene	ND		1.0		ug/L			05/12/22 23:36	1
1,2,3-Trichlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,2,3-Trichloropropane	ND		5.0		ug/L			05/12/22 23:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,2,4-Trimethylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			05/12/22 23:36	1
1,2-Dichlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,2-Dichloroethane	ND		0.50		ug/L			05/12/22 23:36	1
1,2-Dichloropropane	ND		1.0		ug/L			05/12/22 23:36	1
1,3,5-Trimethylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,3-Dichlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
1,3-Dichloropropane	ND		1.0		ug/L			05/12/22 23:36	1
1,4-Dichlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
2,2-Dichloropropane	ND		1.0		ug/L			05/12/22 23:36	1
2-Butanone	ND		20		ug/L			05/12/22 23:36	1
2-Chlorotoluene	ND		1.0		ug/L			05/12/22 23:36	1
2-Hexanone	ND		10		ug/L			05/12/22 23:36	1
4-Chlorotoluene	ND		1.0		ug/L			05/12/22 23:36	1
Acetone	ND		20		ug/L			05/12/22 23:36	1
Benzene	ND		0.50		ug/L			05/12/22 23:36	1
Bromobenzene	ND		1.0		ug/L			05/12/22 23:36	1
Bromochloromethane	ND		2.0		ug/L			05/12/22 23:36	1
Bromodichloromethane	ND		1.0		ug/L			05/12/22 23:36	1
Bromoform	ND		5.0		ug/L			05/12/22 23:36	1
Bromomethane	ND		25		ug/L			05/12/22 23:36	1
Carbon disulfide	ND		10		ug/L			05/12/22 23:36	1
Carbon tetrachloride	ND		0.50		ug/L			05/12/22 23:36	1
Chlorobenzene	ND		1.0		ug/L			05/12/22 23:36	1
Chloroethane	ND		5.0		ug/L			05/12/22 23:36	1
Chloroform	ND		1.0		ug/L			05/12/22 23:36	1
Chloromethane	ND		10		ug/L			05/12/22 23:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			05/12/22 23:36	1
cis-1,3-Dichloropropene	ND		0.50		ug/L			05/12/22 23:36	1
Dibromochloromethane	ND		2.0		ug/L			05/12/22 23:36	1
Dibromomethane	ND		1.0		ug/L			05/12/22 23:36	1
Dichlorodifluoromethane	ND		5.0		ug/L			05/12/22 23:36	1
Diethyl ether	ND		10		ug/L			05/12/22 23:36	1
Di-isopropyl ether (DIPE)	ND		2.0		ug/L			05/12/22 23:36	1
Ethanol	ND		100		ug/L			05/12/22 23:36	1
Ethylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
Ethylene Dibromide	ND		1.0		ug/L			05/12/22 23:36	1

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

Lab Sample ID: MB 570-233824/8
Matrix: Water
Analysis Batch: 233824

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)	ND		2.0		ug/L			05/12/22 23:36	1
Hexachloro-1,3-butadiene	ND		20		ug/L			05/12/22 23:36	1
Hexane	ND		5.0		ug/L			05/12/22 23:36	1
Isobutyl alcohol	ND		100		ug/L			05/12/22 23:36	1
Isopropanol	ND		130		ug/L			05/12/22 23:36	1
Isopropylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
m,p-Xylene	ND		2.0		ug/L			05/12/22 23:36	1
Methylene Chloride	ND		10		ug/L			05/12/22 23:36	1
Methyl-t-Butyl Ether (MTBE)	ND		1.0		ug/L			05/12/22 23:36	1
MIBK	ND		10		ug/L			05/12/22 23:36	1
Naphthalene	ND		10		ug/L			05/12/22 23:36	1
n-Butylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
N-Propylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
o-Xylene	ND		1.0		ug/L			05/12/22 23:36	1
p-Isopropyltoluene	ND		1.0		ug/L			05/12/22 23:36	1
sec-Butylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
Styrene	ND		1.0		ug/L			05/12/22 23:36	1
tert-Amyl alcohol	ND		50		ug/L			05/12/22 23:36	1
Tert-amyl-methyl ether (TAME)	ND		2.0		ug/L			05/12/22 23:36	1
tert-Butyl alcohol (TBA)	ND		10		ug/L			05/12/22 23:36	1
tert-Butylbenzene	ND		1.0		ug/L			05/12/22 23:36	1
Tetrachloroethene	ND		1.0		ug/L			05/12/22 23:36	1
Toluene	ND		1.0		ug/L			05/12/22 23:36	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			05/12/22 23:36	1
trans-1,3-Dichloropropene	ND		0.50		ug/L			05/12/22 23:36	1
Trichloroethene	ND		1.0		ug/L			05/12/22 23:36	1
Trichlorofluoromethane	ND		10		ug/L			05/12/22 23:36	1
Vinyl acetate	ND		10		ug/L			05/12/22 23:36	1
Vinyl chloride	ND		0.50		ug/L			05/12/22 23:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 123*		*05/12/22 23:36*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*05/12/22 23:36*	*1*
Dibromofluoromethane (Surr)	*99*		*78 - 120*		*05/12/22 23:36*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/12/22 23:36*	*1*

Lab Sample ID: LCS 570-233824/4
Matrix: Water
Analysis Batch: 233824

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	20.4		ug/L		102	80 - 128		
1,1,1-Trichloroethane			20.0	18.5		ug/L		92	76 - 122		
1,1,2,2-Tetrachloroethane			20.0	16.9		ug/L		84	79 - 120		
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	16.9		ug/L		84	53 - 122		
1,1,2-Trichloroethane			20.0	19.6		ug/L		98	80 - 120		
1,1-Dichloroethane			20.0	17.6		ug/L		88	72 - 120		
1,1-Dichloroethene			20.0	17.2		ug/L		86	64 - 121		

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

Lab Sample ID: LCS 570-233824/4
Matrix: Water
Analysis Batch: 233824

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	18.0		ug/L		90	77 - 120
1,2,3-Trichlorobenzene	20.0	17.5		ug/L		88	78 - 136
1,2,3-Trichloropropane	20.0	19.7		ug/L		99	74 - 120
1,2,4-Trichlorobenzene	20.0	17.0		ug/L		85	73 - 138
1,2,4-Trimethylbenzene	20.0	18.0		ug/L		90	80 - 121
1,2-Dibromo-3-Chloropropane	20.0	15.8		ug/L		79	74 - 120
1,2-Dichlorobenzene	20.0	18.3		ug/L		91	80 - 120
1,2-Dichloroethane	20.0	17.7		ug/L		88	76 - 120
1,2-Dichloropropane	20.0	18.8		ug/L		94	73 - 122
1,3,5-Trimethylbenzene	20.0	19.7		ug/L		98	80 - 122
1,3-Dichlorobenzene	20.0	18.1		ug/L		90	80 - 120
1,3-Dichloropropane	20.0	18.6		ug/L		93	80 - 120
1,4-Dichlorobenzene	20.0	18.1		ug/L		90	80 - 120
2,2-Dichloropropane	20.0	16.9		ug/L		84	60 - 150
2-Butanone	20.0	17.0	J	ug/L		85	65 - 128
2-Chlorotoluene	20.0	19.2		ug/L		96	79 - 120
2-Hexanone	20.0	14.8		ug/L		74	61 - 140
4-Chlorotoluene	20.0	17.5		ug/L		88	80 - 120
Acetone	20.0	13.8	J	ug/L		69	50 - 134
Benzene	20.0	19.1		ug/L		95	76 - 120
Bromobenzene	20.0	19.8		ug/L		99	80 - 125
Bromochloromethane	20.0	18.3		ug/L		92	79 - 120
Bromodichloromethane	20.0	19.9		ug/L		99	80 - 123
Bromoform	20.0	19.0		ug/L		95	80 - 128
Bromomethane	20.0	23.3	J	ug/L		116	64 - 150
Carbon disulfide	20.0	16.9		ug/L		85	67 - 126
Carbon tetrachloride	20.0	19.2		ug/L		96	80 - 127
Chlorobenzene	20.0	19.3		ug/L		96	80 - 120
Chloroethane	20.0	21.7		ug/L		108	67 - 128
Chloroform	20.0	19.1		ug/L		96	80 - 120
Chloromethane	20.0	17.1		ug/L		86	69 - 132
cis-1,2-Dichloroethene	20.0	18.9		ug/L		95	80 - 120
cis-1,3-Dichloropropene	20.0	18.8		ug/L		94	75 - 133
Dibromochloromethane	20.0	20.9		ug/L		104	79 - 130
Dibromomethane	20.0	19.1		ug/L		96	80 - 120
Dichlorodifluoromethane	20.0	15.2		ug/L		76	60 - 138
Diethyl ether	20.0	19.8		ug/L		99	61 - 121
Di-isopropyl ether (DIPE)	20.0	17.4		ug/L		87	62 - 125
Ethanol	200	327	*+	ug/L		163	50 - 120
Ethylbenzene	20.0	19.0		ug/L		95	80 - 120
Ethylene Dibromide	20.0	18.9		ug/L		94	80 - 120
Ethyl-t-butyl ether (ETBE)	20.0	15.8		ug/L		79	55 - 132
Isopropylbenzene	20.0	19.1		ug/L		96	80 - 123
m,p-Xylene	40.0	38.6		ug/L		97	74 - 122
Methylene Chloride	20.0	17.7		ug/L		89	62 - 133
Methyl-t-Butyl Ether (MTBE)	20.0	16.5		ug/L		82	64 - 120
MIBK	20.0	14.9		ug/L		74	68 - 133
Naphthalene	20.0	16.5		ug/L		83	80 - 120
n-Butylbenzene	20.0	17.9		ug/L		90	76 - 128

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

Lab Sample ID: LCS 570-233824/4
Matrix: Water
Analysis Batch: 233824

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	19.5		ug/L		98	80 - 122
o-Xylene	20.0	19.5		ug/L		98	80 - 121
p-Isopropyltoluene	20.0	17.8		ug/L		89	78 - 125
sec-Butylbenzene	20.0	17.5		ug/L		88	78 - 125
Styrene	20.0	19.5		ug/L		98	80 - 124
tert-Amyl alcohol	100	68.6		ug/L		69	58 - 136
Tert-amyl-methyl ether (TAME)	20.0	17.4		ug/L		87	66 - 133
tert-Butyl alcohol (TBA)	100	90.8		ug/L		91	71 - 120
tert-Butylbenzene	20.0	17.7		ug/L		88	76 - 132
Tetrachloroethene	20.0	19.5		ug/L		98	72 - 135
Toluene	20.0	19.3		ug/L		96	76 - 120
trans-1,2-Dichloroethene	20.0	17.7		ug/L		88	73 - 120
trans-1,3-Dichloropropene	20.0	18.4		ug/L		92	80 - 132
Trichloroethene	20.0	19.2		ug/L		96	80 - 122
Trichlorofluoromethane	20.0	22.3		ug/L		112	69 - 139
Vinyl acetate	20.0	16.2		ug/L		81	74 - 147
Vinyl chloride	20.0	20.2		ug/L		101	70 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 123*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*78 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 570-233824/5
Matrix: Water
Analysis Batch: 233824

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	22.1		ug/L		110	80 - 128	8	20
1,1,1-Trichloroethane	20.0	19.5		ug/L		98	76 - 122	5	20
1,1,2,2-Tetrachloroethane	20.0	18.5		ug/L		93	79 - 120	9	20
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.1		ug/L		90	53 - 122	7	20
1,1,2-Trichloroethane	20.0	20.6		ug/L		103	80 - 120	5	20
1,1-Dichloroethane	20.0	18.7		ug/L		93	72 - 120	6	20
1,1-Dichloroethene	20.0	18.1		ug/L		91	64 - 121	5	20
1,1-Dichloropropene	20.0	19.4		ug/L		97	77 - 120	8	20
1,2,3-Trichlorobenzene	20.0	18.4		ug/L		92	78 - 136	5	20
1,2,3-Trichloropropane	20.0	21.4		ug/L		107	74 - 120	8	20
1,2,4-Trichlorobenzene	20.0	17.9		ug/L		89	73 - 138	5	20
1,2,4-Trimethylbenzene	20.0	18.8		ug/L		94	80 - 121	4	20
1,2-Dibromo-3-Chloropropane	20.0	17.4		ug/L		87	74 - 120	10	20
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120	6	20
1,2-Dichloroethane	20.0	19.4		ug/L		97	76 - 120	9	20
1,2-Dichloropropane	20.0	20.4		ug/L		102	73 - 122	8	20
1,3,5-Trimethylbenzene	20.0	21.5		ug/L		108	80 - 122	9	20
1,3-Dichlorobenzene	20.0	19.1		ug/L		95	80 - 120	5	20
1,3-Dichloropropane	20.0	20.2		ug/L		101	80 - 120	8	20

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

Lab Sample ID: LCSD 570-233824/5
Matrix: Water
Analysis Batch: 233824

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	19.4		ug/L		97	80 - 120	7	20
2,2-Dichloropropane	20.0	17.5		ug/L		88	60 - 150	4	20
2-Butanone	20.0	20.7		ug/L		103	65 - 128	20	20
2-Chlorotoluene	20.0	20.4		ug/L		102	79 - 120	6	20
2-Hexanone	20.0	17.8		ug/L		89	61 - 140	18	20
4-Chlorotoluene	20.0	18.9		ug/L		94	80 - 120	7	20
Acetone	20.0	14.5	J	ug/L		72	50 - 134	5	25
Benzene	20.0	20.6		ug/L		103	76 - 120	8	20
Bromobenzene	20.0	21.3		ug/L		106	80 - 125	7	20
Bromochloromethane	20.0	19.9		ug/L		100	79 - 120	8	20
Bromodichloromethane	20.0	21.5		ug/L		107	80 - 123	8	20
Bromoform	20.0	20.6		ug/L		103	80 - 128	8	20
Bromomethane	20.0	22.3	J	ug/L		112	64 - 150	4	20
Carbon disulfide	20.0	18.1		ug/L		91	67 - 126	7	20
Carbon tetrachloride	20.0	20.6		ug/L		103	80 - 127	7	20
Chlorobenzene	20.0	20.7		ug/L		104	80 - 120	7	20
Chloroethane	20.0	21.3		ug/L		106	67 - 128	2	20
Chloroform	20.0	19.6		ug/L		98	80 - 120	3	20
Chloromethane	20.0	17.1		ug/L		85	69 - 132	0	20
cis-1,2-Dichloroethene	20.0	20.0		ug/L		100	80 - 120	5	20
cis-1,3-Dichloropropene	20.0	20.5		ug/L		103	75 - 133	9	20
Dibromochloromethane	20.0	22.4		ug/L		112	79 - 130	7	20
Dibromomethane	20.0	21.2		ug/L		106	80 - 120	10	20
Dichlorodifluoromethane	20.0	15.1		ug/L		76	60 - 138	0	21
Diethyl ether	20.0	20.3		ug/L		102	61 - 121	2	20
Di-isopropyl ether (DIPE)	20.0	18.4		ug/L		92	62 - 125	6	20
Ethanol	200	405	*+	ug/L		203	50 - 120	21	25
Ethylbenzene	20.0	20.7		ug/L		103	80 - 120	8	20
Ethylene Dibromide	20.0	20.2		ug/L		101	80 - 120	7	20
Ethyl-t-butyl ether (ETBE)	20.0	17.0		ug/L		85	55 - 132	7	20
Isopropylbenzene	20.0	20.7		ug/L		103	80 - 123	8	20
m,p-Xylene	40.0	41.8		ug/L		104	74 - 122	8	20
Methylene Chloride	20.0	18.8		ug/L		94	62 - 133	6	20
Methyl-t-Butyl Ether (MTBE)	20.0	18.1		ug/L		90	64 - 120	9	20
MIBK	20.0	17.2		ug/L		86	68 - 133	15	20
Naphthalene	20.0	17.7		ug/L		88	80 - 120	7	20
n-Butylbenzene	20.0	19.2		ug/L		96	76 - 128	7	20
N-Propylbenzene	20.0	21.2		ug/L		106	80 - 122	8	20
o-Xylene	20.0	21.2		ug/L		106	80 - 121	8	20
p-Isopropyltoluene	20.0	19.1		ug/L		95	78 - 125	7	20
sec-Butylbenzene	20.0	18.6		ug/L		93	78 - 125	6	20
Styrene	20.0	21.2		ug/L		106	80 - 124	8	20
tert-Amyl alcohol	100	72.7		ug/L		73	58 - 136	6	20
Tert-amyl-methyl ether (TAME)	20.0	18.8		ug/L		94	66 - 133	7	20
tert-Butyl alcohol (TBA)	100	109		ug/L		109	71 - 120	18	20
tert-Butylbenzene	20.0	18.8		ug/L		94	76 - 132	6	20
Tetrachloroethene	20.0	21.2		ug/L		106	72 - 135	8	20
Toluene	20.0	21.0		ug/L		105	76 - 120	9	20
trans-1,2-Dichloroethene	20.0	18.7		ug/L		94	73 - 120	6	20

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

Lab Sample ID: LCSD 570-233824/5
Matrix: Water
Analysis Batch: 233824

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	19.7		ug/L		99	80 - 132	7	20
Trichloroethene			20.0	20.6		ug/L		103	80 - 122	7	20
Trichlorofluoromethane			20.0	22.1		ug/L		110	69 - 139	1	20
Vinyl acetate			20.0	16.5		ug/L		82	74 - 147	2	20
Vinyl chloride			20.0	20.1		ug/L		101	70 - 124	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 123*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*78 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 380-1269-1 MS
Matrix: Water
Analysis Batch: 233824

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		20.0	19.7		ug/L		98	75 - 138
1,1,1-Trichloroethane	ND		20.0	18.2		ug/L		91	69 - 127
1,1,2,2-Tetrachloroethane	ND		20.0	18.5		ug/L		92	75 - 133
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	17.4		ug/L		87	50 - 125
1,1,2-Trichloroethane	ND		20.0	19.3		ug/L		96	75 - 125
1,1-Dichloroethane	ND		20.0	17.2		ug/L		86	75 - 125
1,1-Dichloroethene	ND		20.0	17.3		ug/L		86	57 - 135
1,1-Dichloropropene	ND		20.0	17.9		ug/L		89	73 - 125
1,2,3-Trichlorobenzene	ND		20.0	15.2		ug/L		76	73 - 136
1,2,3-Trichloropropane	ND		20.0	18.9		ug/L		94	75 - 125
1,2,4-Trichlorobenzene	ND		20.0	14.7		ug/L		74	69 - 136
1,2,4-Trimethylbenzene	ND		20.0	17.1		ug/L		85	75 - 131
1,2-Dibromo-3-Chloropropane	ND		20.0	16.2		ug/L		81	65 - 128
1,2-Dichlorobenzene	ND		20.0	17.8		ug/L		89	75 - 125
1,2-Dichloroethane	ND		20.0	18.1		ug/L		90	75 - 127
1,2-Dichloropropane	ND		20.0	18.6		ug/L		93	75 - 126
1,3,5-Trimethylbenzene	ND		20.0	18.8		ug/L		94	75 - 129
1,3-Dichlorobenzene	ND		20.0	17.3		ug/L		86	75 - 125
1,3-Dichloropropane	ND		20.0	18.5		ug/L		93	75 - 126
1,4-Dichlorobenzene	ND		20.0	17.1		ug/L		85	75 - 125
2,2-Dichloropropane	ND		20.0	15.3		ug/L		76	51 - 141
2-Butanone	ND		20.0	ND		ug/L		96	61 - 137
2-Chlorotoluene	ND		20.0	17.9		ug/L		90	75 - 125
2-Hexanone	ND		20.0	14.5		ug/L		72	60 - 155
4-Chlorotoluene	ND		20.0	17.2		ug/L		86	75 - 130
Acetone	ND		20.0	21.3		ug/L		106	49 - 133
Benzene	ND		20.0	18.8		ug/L		94	75 - 125
Bromobenzene	ND		20.0	19.1		ug/L		96	75 - 127
Bromochloromethane	ND		20.0	18.1		ug/L		90	72 - 125
Bromodichloromethane	ND		20.0	19.5		ug/L		97	75 - 129
Bromoform	ND		20.0	20.0		ug/L		100	65 - 146

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

Lab Sample ID: 380-1269-1 MS
Matrix: Water
Analysis Batch: 233824

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromomethane	ND		20.0	27.4		ug/L		137	51 - 146
Carbon disulfide	ND		20.0	17.2		ug/L		86	67 - 129
Carbon tetrachloride	ND		20.0	18.9		ug/L		95	68 - 137
Chlorobenzene	ND		20.0	18.6		ug/L		93	75 - 125
Chloroethane	ND		20.0	22.3		ug/L		112	60 - 145
Chloroform	ND		20.0	18.3		ug/L		92	75 - 125
Chloromethane	ND		20.0	18.1		ug/L		91	56 - 142
cis-1,2-Dichloroethene	ND		20.0	18.7		ug/L		93	57 - 142
cis-1,3-Dichloropropene	ND		20.0	17.8		ug/L		89	73 - 128
Dibromochloromethane	ND		20.0	19.9		ug/L		99	74 - 140
Dibromomethane	ND		20.0	19.1		ug/L		95	75 - 125
Dichlorodifluoromethane	ND		20.0	16.6		ug/L		83	51 - 128
Diethyl ether	ND		20.0	20.2		ug/L		101	61 - 129
Di-isopropyl ether (DIPE)	ND		20.0	17.1		ug/L		86	71 - 129
Ethanol	ND	*+ F1	200	368	F1	ug/L		184	21 - 180
Ethylbenzene	ND		20.0	18.5		ug/L		92	75 - 127
Ethylene Dibromide	ND		20.0	18.7		ug/L		93	75 - 125
Ethyl-t-butyl ether (ETBE)	ND		20.0	15.2		ug/L		76	67 - 125
Isopropylbenzene	ND		20.0	18.5		ug/L		92	75 - 130
m,p-Xylene	ND		40.0	37.0		ug/L		92	75 - 128
Methylene Chloride	ND		20.0	17.2		ug/L		86	70 - 125
Methyl-t-Butyl Ether (MTBE)	ND		20.0	16.6		ug/L		83	65 - 125
MIBK	ND		20.0	14.7		ug/L		74	66 - 138
Naphthalene	ND		20.0	16.4		ug/L		82	75 - 134
n-Butylbenzene	ND		20.0	17.2		ug/L		86	71 - 137
N-Propylbenzene	ND		20.0	18.8		ug/L		94	75 - 129
o-Xylene	ND		20.0	18.6		ug/L		93	75 - 128
p-Isopropyltoluene	ND		20.0	17.6		ug/L		88	74 - 135
sec-Butylbenzene	ND		20.0	17.7		ug/L		89	75 - 132
Styrene	ND		20.0	18.3		ug/L		91	75 - 129
tert-Amyl alcohol	ND		100	66.8		ug/L		67	34 - 151
Tert-amyl-methyl ether (TAME)	ND		20.0	16.9		ug/L		84	70 - 125
tert-Butyl alcohol (TBA)	ND		100	86.2		ug/L		86	68 - 139
tert-Butylbenzene	ND		20.0	18.0		ug/L		90	75 - 132
Tetrachloroethene	ND		20.0	19.0		ug/L		95	54 - 149
Toluene	ND		20.0	19.0		ug/L		95	75 - 125
trans-1,2-Dichloroethene	ND		20.0	17.6		ug/L		88	70 - 125
trans-1,3-Dichloropropene	ND		20.0	16.9		ug/L		84	69 - 144
Trichloroethene	ND		20.0	18.6		ug/L		93	68 - 128
Trichlorofluoromethane	ND		20.0	23.8		ug/L		119	54 - 150
Vinyl acetate	ND		20.0	11.5		ug/L		57	50 - 150
Vinyl chloride	ND		20.0	21.3		ug/L		106	58 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 123*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*78 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 380-1269-1 MSD
Matrix: Water
Analysis Batch: 233824

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		20.0	21.6		ug/L		108	75 - 138	9	20
1,1,1-Trichloroethane	ND		20.0	18.9		ug/L		95	69 - 127	4	20
1,1,2,2-Tetrachloroethane	ND		20.0	20.4		ug/L		102	75 - 133	10	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20.0	18.0		ug/L		90	50 - 125	4	20
1,1,2-Trichloroethane	ND		20.0	21.2		ug/L		106	75 - 125	10	20
1,1-Dichloroethane	ND		20.0	17.9		ug/L		90	75 - 125	4	20
1,1-Dichloroethene	ND		20.0	17.8		ug/L		89	57 - 135	3	20
1,1-Dichloropropene	ND		20.0	18.6		ug/L		93	73 - 125	4	20
1,2,3-Trichlorobenzene	ND		20.0	17.8		ug/L		89	73 - 136	16	20
1,2,3-Trichloropropane	ND		20.0	21.1		ug/L		106	75 - 125	11	20
1,2,4-Trichlorobenzene	ND		20.0	16.4		ug/L		82	69 - 136	11	20
1,2,4-Trimethylbenzene	ND		20.0	18.9		ug/L		94	75 - 131	10	20
1,2-Dibromo-3-Chloropropane	ND		20.0	18.7		ug/L		93	65 - 128	15	20
1,2-Dichlorobenzene	ND		20.0	19.5		ug/L		97	75 - 125	9	20
1,2-Dichloroethane	ND		20.0	18.8		ug/L		94	75 - 127	4	20
1,2-Dichloropropane	ND		20.0	20.1		ug/L		100	75 - 126	7	20
1,3,5-Trimethylbenzene	ND		20.0	20.3		ug/L		102	75 - 129	8	20
1,3-Dichlorobenzene	ND		20.0	18.8		ug/L		94	75 - 125	9	20
1,3-Dichloropropane	ND		20.0	20.8		ug/L		104	75 - 126	12	20
1,4-Dichlorobenzene	ND		20.0	18.7		ug/L		93	75 - 125	9	20
2,2-Dichloropropane	ND		20.0	16.1		ug/L		80	51 - 141	5	20
2-Butanone	ND		20.0	20.9		ug/L		104	61 - 137	8	20
2-Chlorotoluene	ND		20.0	19.6		ug/L		98	75 - 125	9	20
2-Hexanone	ND		20.0	16.9		ug/L		85	60 - 155	15	20
4-Chlorotoluene	ND		20.0	18.7		ug/L		93	75 - 130	8	20
Acetone	ND		20.0	ND		ug/L		95	49 - 133	11	20
Benzene	ND		20.0	19.5		ug/L		97	75 - 125	4	20
Bromobenzene	ND		20.0	20.7		ug/L		103	75 - 127	8	20
Bromochloromethane	ND		20.0	19.2		ug/L		96	72 - 125	6	20
Bromodichloromethane	ND		20.0	20.4		ug/L		102	75 - 129	5	20
Bromoform	ND		20.0	21.8		ug/L		109	65 - 146	9	20
Bromomethane	ND		20.0	ND		ug/L		124	51 - 146	10	23
Carbon disulfide	ND		20.0	17.7		ug/L		88	67 - 129	3	20
Carbon tetrachloride	ND		20.0	20.2		ug/L		101	68 - 137	7	20
Chlorobenzene	ND		20.0	20.3		ug/L		101	75 - 125	9	20
Chloroethane	ND		20.0	22.8		ug/L		114	60 - 145	2	20
Chloroform	ND		20.0	19.3		ug/L		96	75 - 125	5	20
Chloromethane	ND		20.0	18.5		ug/L		93	56 - 142	2	20
cis-1,2-Dichloroethene	ND		20.0	19.3		ug/L		97	57 - 142	3	20
cis-1,3-Dichloropropene	ND		20.0	18.3		ug/L		91	73 - 128	3	20
Dibromochloromethane	ND		20.0	22.4		ug/L		112	74 - 140	12	20
Dibromomethane	ND		20.0	19.7		ug/L		99	75 - 125	3	20
Dichlorodifluoromethane	ND		20.0	16.8		ug/L		84	51 - 128	1	20
Diethyl ether	ND		20.0	21.4		ug/L		107	61 - 129	5	20
Di-isopropyl ether (DIPE)	ND		20.0	18.3		ug/L		91	71 - 129	6	20
Ethanol	ND	*+ F1	200	309		ug/L		155	21 - 180	17	40
Ethylbenzene	ND		20.0	20.2		ug/L		101	75 - 127	9	20
Ethylene Dibromide	ND		20.0	20.5		ug/L		103	75 - 125	9	20

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

Lab Sample ID: 380-1269-1 MSD
Matrix: Water
Analysis Batch: 233824

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethyl-t-butyl ether (ETBE)	ND		20.0	16.6		ug/L		83	67 - 125	9	20
Isopropylbenzene	ND		20.0	20.1		ug/L		101	75 - 130	9	20
m,p-Xylene	ND		40.0	40.2		ug/L		101	75 - 128	9	20
Methylene Chloride	ND		20.0	18.3		ug/L		91	70 - 125	6	20
Methyl-t-Butyl Ether (MTBE)	ND		20.0	17.9		ug/L		89	65 - 125	8	20
MIBK	ND		20.0	16.7		ug/L		83	66 - 138	12	20
Naphthalene	ND		20.0	18.2		ug/L		91	75 - 134	10	20
n-Butylbenzene	ND		20.0	18.7		ug/L		93	71 - 137	8	20
N-Propylbenzene	ND		20.0	20.0		ug/L		100	75 - 129	6	20
o-Xylene	ND		20.0	20.6		ug/L		103	75 - 128	10	20
p-Isopropyltoluene	ND		20.0	19.0		ug/L		95	74 - 135	8	20
sec-Butylbenzene	ND		20.0	19.3		ug/L		97	75 - 132	9	20
Styrene	ND		20.0	20.2		ug/L		101	75 - 129	10	20
tert-Amyl alcohol	ND		100	73.9		ug/L		74	34 - 151	10	20
Tert-amyl-methyl ether (TAME)	ND		20.0	18.0		ug/L		90	70 - 125	7	20
tert-Butyl alcohol (TBA)	ND		100	95.9		ug/L		96	68 - 139	11	20
tert-Butylbenzene	ND		20.0	19.6		ug/L		98	75 - 132	8	20
Tetrachloroethene	ND		20.0	20.5		ug/L		103	54 - 149	8	20
Toluene	ND		20.0	19.6		ug/L		98	75 - 125	3	20
trans-1,2-Dichloroethene	ND		20.0	18.3		ug/L		92	70 - 125	4	20
trans-1,3-Dichloropropene	ND		20.0	18.8		ug/L		94	69 - 144	11	20
Trichloroethene	ND		20.0	19.4		ug/L		97	68 - 128	4	20
Trichlorofluoromethane	ND		20.0	24.6		ug/L		123	54 - 150	3	20
Vinyl acetate	ND		20.0	12.9		ug/L		65	50 - 150	12	20
Vinyl chloride	ND		20.0	22.5		ug/L		113	58 - 140	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 123*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*78 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Lab Sample ID: 96783-B1
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
1-Methylphenanthrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
2,3,5-Trimethylnaphthalene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
2,6-Dimethylnaphthalene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
2-Methylnaphthalene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Acenaphthene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Acenaphthylene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Anthracene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Benz[a]anthracene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Benzo[a]pyrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 96783-B1
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Benzo[e]pyrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Benzo[g,h,i]perylene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Benzo[k]fluoranthene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Biphenyl	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Chrysene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Dibenz[a,h]anthracene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Dibenzo[a,l]pyrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Dibenzothiophene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Disalicylidenepropanediamine	ND		0.1	0.05	µg/L		05/02/22 00:00	05/14/22 04:12	1
Fluoranthene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Fluorene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Indeno[1,2,3-cd]pyrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Naphthalene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Perylene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Phenanthrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1
Pyrene	ND		0.005	0.001	µg/L		05/02/22 00:00	05/14/22 04:12	1

Surrogate	*Blank %Recovery*	*Blank Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
(d10-Acenaphthene)	*91*		*65 - 113*	*05/02/22 00:00*	*05/14/22 04:12*	*1*
(d10-Phenanthrene)	*95*		*80 - 111*	*05/02/22 00:00*	*05/14/22 04:12*	*1*
(d12-Chrysene)	*93*		*60 - 139*	*05/02/22 00:00*	*05/14/22 04:12*	*1*
(d12-Perylene)	*89*		*36 - 161*	*05/02/22 00:00*	*05/14/22 04:12*	*1*
(d8-Naphthalene)	*84*		*44 - 119*	*05/02/22 00:00*	*05/14/22 04:12*	*1*

Lab Sample ID: 96783-BS1
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0.5	0.454		µg/L		91	49 - 117
1-Methylphenanthrene	0.5	0.468		µg/L		94	66 - 127
2,3,5-Trimethylnaphthalene	0.5	0.462		µg/L		92	57 - 120
2,6-Dimethylnaphthalene	0.5	0.464		µg/L		93	54 - 117
2-Methylnaphthalene	1.5	1.41		µg/L		94	47 - 130
Acenaphthene	1.5	1.39		µg/L		93	53 - 131
Acenaphthylene	1.5	1.46		µg/L		97	43 - 140
Anthracene	1.5	1.44		µg/L		96	58 - 135
Benz[a]anthracene	1.5	1.43		µg/L		95	55 - 145
Benzo[a]pyrene	1.5	1.41		µg/L		94	51 - 143
Benzo[b]fluoranthene	1.5	1.48		µg/L		99	46 - 165
Benzo[e]pyrene	0.5	0.42		µg/L		84	42 - 152
Benzo[g,h,i]perylene	1.5	1.52		µg/L		101	63 - 133
Benzo[k]fluoranthene	1.5	1.43		µg/L		95	56 - 145
Biphenyl	0.5	0.468		µg/L		94	56 - 119
Chrysene	1.5	1.38		µg/L		92	56 - 141
Dibenz[a,h]anthracene	1.5	1.58		µg/L		105	55 - 150
Dibenzo[a,l]pyrene	50	38.8		µg/L		78	50 - 150

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 96783-BS1
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Dibenzothiophene			0.5	0.477		µg/L		95	75 - 113		
Disalicylidenepropanediamine			50	27		µg/L		54	50 - 150		
Fluoranthene			1.5	1.5		µg/L		100	60 - 146		
Fluorene			1.5	1.48		µg/L		99	58 - 131		
Indeno[1,2,3-cd]pyrene			1.5	1.6		µg/L		107	50 - 151		
Naphthalene			1.5	1.31		µg/L		87	41 - 126		
Perylene			0.5	0.43		µg/L		86	48 - 141		
Phenanthrene			1.5	1.46		µg/L		97	67 - 127		
Pyrene			1.5	1.5		µg/L		100	54 - 156		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
(d10-Acenaphthene)	*96*		*65 - 113*
(d10-Phenanthrene)	*97*		*80 - 111*
(d12-Chrysene)	*97*		*60 - 139*
(d12-Perylene)	*94*		*36 - 161*
(d8-Naphthalene)	*89*		*44 - 119*

Lab Sample ID: 96783-BS2
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene			0.5	0.426		µg/L		85	49 - 117	7	30
1-Methylphenanthrene			0.5	0.461		µg/L		92	66 - 127	2	30
2,3,5-Trimethylnaphthalene			0.5	0.444		µg/L		89	57 - 120	3	30
2,6-Dimethylnaphthalene			0.5	0.438		µg/L		88	54 - 117	6	30
2-Methylnaphthalene			1.5	1.32		µg/L		88	47 - 130	7	30
Acenaphthene			1.5	1.32		µg/L		88	53 - 131	6	30
Acenaphthylene			1.5	1.4		µg/L		93	43 - 140	4	30
Anthracene			1.5	1.39		µg/L		93	58 - 135	3	30
Benz[a]anthracene			1.5	1.38		µg/L		92	55 - 145	3	30
Benzo[a]pyrene			1.5	1.41		µg/L		94	51 - 143	0	30
Benzo[b]fluoranthene			1.5	1.43		µg/L		95	46 - 165	4	30
Benzo[e]pyrene			0.5	0.42		µg/L		84	42 - 152	0	30
Benzo[g,h,i]perylene			1.5	1.5		µg/L		100	63 - 133	1	30
Benzo[k]fluoranthene			1.5	1.39		µg/L		93	56 - 145	2	30
Biphenyl			0.5	0.44		µg/L		88	56 - 119	7	30
Chrysene			1.5	1.32		µg/L		88	56 - 141	4	30
Dibenz[a,h]anthracene			1.5	1.57		µg/L		105	55 - 150	0	30
Dibenzo[a,l]pyrene			50	39.1		µg/L		78	50 - 150	1	30
Dibenzothiophene			0.5	0.459		µg/L		92	75 - 113	3	30
Disalicylidenepropanediamine			50	35.7		µg/L		71	50 - 150	27	30
Fluoranthene			1.5	1.46		µg/L		97	60 - 146	3	30
Fluorene			1.5	1.42		µg/L		95	58 - 131	4	30
Indeno[1,2,3-cd]pyrene			1.5	1.59		µg/L		106	50 - 151	1	30
Naphthalene			1.5	1.22		µg/L		81	41 - 126	8	30
Perylene			0.5	0.425		µg/L		85	48 - 141	1	30
Phenanthrene			1.5	1.4		µg/L		93	67 - 127	4	30

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 96783-BS2
Matrix: water
Analysis Batch: O-35146

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte			Spike Added	LCS DUP Result	LCS DUP Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Pyrene			1.5	1.47		µg/L		98	54 - 156	2	30

Surrogate	*LCS DUP %Recovery*	*LCS DUP Qualifier*	*Limits*
(d10-Acenaphthene)	*91*		*65 - 113*
(d10-Phenanthrene)	*93*		*80 - 111*
(d12-Chrysene)	*93*		*60 - 139*
(d12-Perylene)	*91*		*36 - 161*
(d8-Naphthalene)	*82*		*44 - 119*

Lab Sample ID: 380-1269-1 MS
Matrix: Water
Analysis Batch: O-35146

Client Sample ID: DH43-1
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Methylnaphthalene	0		0.5	0.376		µg/L		75	39 - 104
1-Methylphenanthrene	0		0.5	0.456		µg/L		91	62 - 136
2,3,5-Trimethylnaphthalene	0		0.5	0.406		µg/L		81	47 - 132
2,6-Dimethylnaphthalene	0		0.5	0.388		µg/L		78	37 - 118
2-Methylnaphthalene	0		0.5	0.374		µg/L		75	33 - 113
Acenaphthene	0		0.5	0.402		µg/L		80	51 - 116
Acenaphthylene	0		0.5	0.412		µg/L		82	53 - 127
Anthracene	0		0.5	0.418		µg/L		84	60 - 126
Benz[a]anthracene	0		0.5	0.395		µg/L		79	51 - 165
Benzo[a]pyrene	0		0.5	0.384		µg/L		77	24 - 170
Benzo[b]fluoranthene	0		0.5	0.383		µg/L		77	38 - 158
Benzo[e]pyrene	0.0103		0.5	0.512		µg/L		100	26 - 157
Benzo[g,h,i]perylene	0.00971		0.5	0.533		µg/L		105	57 - 133
Benzo[k]fluoranthene	0		0.5	0.38		µg/L		76	27 - 167
Biphenyl	0		0.5	0.389		µg/L		78	41 - 111
Chrysene	0		0.5	0.376		µg/L		75	58 - 136
Dibenz[a,h]anthracene	0		0.5	0.458		µg/L		92	53 - 156
Dibenzo[a,l]pyrene	0		50	33.1		µg/L		66	50 - 150
Dibenzothiophene	0		0.5	0.429		µg/L		86	69 - 112
Disalicylidenepropanediamine	0		50	40.9		µg/L		82	50 - 150
Fluoranthene	0.00589		0.5	0.455		µg/L		90	61 - 147
Fluorene	0		0.5	0.42		µg/L		84	62 - 120
Indeno[1,2,3-cd]pyrene	0		0.5	0.56		µg/L		112	58 - 147
Naphthalene	0		0.5	0.355		µg/L		71	22 - 110
Perylene	0		0.5	0.388		µg/L		78	34 - 147
Phenanthrene	0.00746		0.5	0.438		µg/L		86	64 - 121
Pyrene	0.00787		0.5	0.469		µg/L		92	65 - 146

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
(d10-Acenaphthene)	*83*		*45 - 118*
(d10-Phenanthrene)	*90*		*56 - 123*
(d12-Chrysene)	*85*		*36 - 142*
(d12-Perylene)	*99*		*36 - 161*
(d8-Naphthalene)	*72*		*20 - 112*

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i

Lab Sample ID: 380-1269-1 MSD
Matrix: Water
Analysis Batch: O-35146

Client Sample ID: DH43-1
Prep Type: Total/NA
Prep Batch: O-35146_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	0		0.568000018596649	0.436		µg/L		77	39 - 104	3	30
1-Methylphenanthrene	0		0.568000018596649	0.566		µg/L		100	62 - 136	8	30
2,3,5-Trimethylnaphthalene	0		0.568000018596649	0.493		µg/L		87	47 - 132	7	30
2,6-Dimethylnaphthalene	0		0.568000018596649	0.461		µg/L		81	37 - 118	4	30
2-Methylnaphthalene	0		0.568000018596649	0.435		µg/L		77	33 - 113	3	30
Acenaphthene	0		0.568000018596649	0.473		µg/L		83	51 - 116	4	30
Acenaphthylene	0		0.568000018596649	0.488		µg/L		86	53 - 127	5	30
Anthracene	0		0.568000018596649	0.515		µg/L		91	60 - 126	8	30
Benz[a]anthracene	0		0.568000018596649	0.531		µg/L		93	51 - 165	16	30
Benzo[a]pyrene	0		0.568000018596649	0.502		µg/L		88	24 - 170	13	30
Benzo[b]fluoranthene	0		0.568000018596649	0.558		µg/L		98	38 - 158	24	30
Benzo[e]pyrene	0.0103		0.568000018596649	0.687		µg/L		119	26 - 157	17	30
Benzo[g,h,i]perylene	0.00971		0.568000018596649	0.698		µg/L		121	57 - 133	14	30
Benzo[k]fluoranthene	0		0.568000018596649	0.51		µg/L		90	27 - 167	17	30
Biphenyl	0		0.568000018596649	0.452		µg/L		80	41 - 111	3	30
Chrysene	0		0.568000018596649	0.513		µg/L		90	58 - 136	20	30
Dibenz[a,h]anthracene	0		0.568000018596649	0.644		µg/L		113	53 - 156	20	30
Dibenzo[a,l]pyrene	0		56.799999 2370605	29.6		µg/L		52	50 - 150	24	30
Dibenzothiophene	0		0.568000018596649	0.52		µg/L		92	69 - 112	7	30
Disalicylidenepropanediamine	0		56.799999 2370605	42.4		µg/L		75	50 - 150	9	30
Fluoranthene	0.00589		0.568000018596649	0.57		µg/L		99	61 - 147	10	30
Fluorene	0		0.568000018596649	0.5		µg/L		88	62 - 120	5	30
Indeno[1,2,3-cd]pyrene	0		0.568000018596649	0.714		µg/L		126	58 - 147	12	30
Naphthalene	0		0.568000018596649	0.409		µg/L		72	22 - 110	1	30
Perylene	0		0.568000018596649	0.496		µg/L		87	34 - 147	11	30
Phenanthrene	0.00746		0.568000018596649	0.536		µg/L		93	64 - 121	8	30
Pyrene	0.00787		0.568000018596649	0.589		µg/L		102	65 - 146	10	30

Method: 625 - PAH Only - EPA 625 Base/Neutral and Acid Organics i (Continued)

Lab Sample ID: 380-1269-1 MSD
Matrix: Water
Analysis Batch: O-35146

Client Sample ID: DH43-1
Prep Type: Total/NA
Prep Batch: O-35146_P

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
(d10-Acenaphthene)	*85*		*45 - 118*
(d10-Phenanthrene)	*94*		*56 - 123*
(d12-Chrysene)	*88*		*36 - 142*
(d12-Perylene)	*104*		*36 - 161*
(d8-Naphthalene)	*73*		*20 - 112*

Method: 8015 GRO - SW846 8015B Gasoline Range Organics

Lab Sample ID: 22VGH7E03B
Matrix: WATER
Analysis Batch: 22VGH7E03

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GASOLINE	ND	U	0.020		mg/L			05/06/22 16:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOFLUOROBENZENE					*05/06/22 16:47*	*1*

Lab Sample ID: 22VGH7E03L
Matrix: WATER
Analysis Batch: 22VGH7E03

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
GASOLINE			0.500	0.486		mg/L		97	60 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOFLUOROBENZENE	*118*		*70 - 130*

Lab Sample ID: 380-1269-1 MSD
Matrix: Water
Analysis Batch: 22VGH7E03

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
GASOLINE	ND		0.500	0.435		mg/L		87	50 - 130	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
BROMOFLUOROBENZENE	*108*		*60 - 140*

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO

Lab Sample ID: 22DSE013WB
Matrix: WATER
Analysis Batch: 22DSE013W

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DIESEL	ND	U	0.025		mg/L			05/10/22 15:29	1
JP5	ND	U	0.050		mg/L			05/10/22 15:29	1
JP8	ND	U	0.050		mg/L			05/10/22 15:29	1

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO (Continued)

Lab Sample ID: 22DSE013WB
Matrix: WATER
Analysis Batch: 22DSE013W

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MOTOR OIL	ND	U	0.050		mg/L			05/10/22 15:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
BROMOBENZENE					*05/10/22 15:29*	*1*
HEXACOSANE					*05/10/22 15:29*	*1*

Lab Sample ID: 22DSE013WL
Matrix: WATER
Analysis Batch: 22DSE013W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
DIESEL			2.50	2.45		mg/L		98	50 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOBENZENE	*104*		*60 - 130*
HEXACOSANE	*102*		*60 - 130*

Lab Sample ID: 22J5E013WL
Matrix: WATER
Analysis Batch: 22DSE013W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
JP5			2.50	2.30		mg/L		92	30 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOBENZENE	*108*		*60 - 130*
HEXACOSANE	*100*		*60 - 130*

Lab Sample ID: 22J8E013WL
Matrix: WATER
Analysis Batch: 22DSE013W

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
JP8			2.50	2.29		mg/L		92	30 - 160		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
BROMOBENZENE	*101*		*60 - 130*
HEXACOSANE	*103*		*60 - 130*

Lab Sample ID: 380-1269-1 MS
Matrix: Water
Analysis Batch: 22VGH7E03

Client Sample ID: DH43-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
GASOLINE	ND		0.500	0.462		mg/L		92	50 - 130		

Method: TPH 815 Diesel and Motor Oil - 8015 - TPH DRO/ORO (Continued)

Lab Sample ID: 380-1269-1 MS
Matrix: Water
Analysis Batch: 22VGH7E03

Client Sample ID: DH43-1
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
BROMOFLUOROBENZENE	107		60 - 140

GC/MS VOA

Analysis Batch: 233824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-1	DH43-1	Total/NA	Water	8260B	
380-1269-2	DH43-2	Total/NA	Water	8260B	
380-1269-3	DH43-3	Total/NA	Water	8260B	
380-1269-4	DH43-4	Total/NA	Water	8260B	
380-1269-5	DH43-5	Total/NA	Water	8260B	
380-1269-6	TRAVEL BLANK	Total/NA	Water	8260B	
MB 570-233824/8	Method Blank	Total/NA	Water	8260B	
LCS 570-233824/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 570-233824/5	Lab Control Sample Dup	Total/NA	Water	8260B	
380-1269-1 MS	DH43-1	Total/NA	Water	8260B	
380-1269-1 MSD	DH43-1	Total/NA	Water	8260B	

Subcontract

Analysis Batch: O-35146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-1	DH43-1	Total/NA	Water	625 - PAH Only	O-35146_P
380-1269-2	DH43-2	Total/NA	Water	625 - PAH Only	O-35146_P
380-1269-3	DH43-3	Total/NA	Water	625 - PAH Only	O-35146_P
380-1269-4	DH43-4	Total/NA	Water	625 - PAH Only	O-35146_P
380-1269-5	DH43-5	Total/NA	Water	625 - PAH Only	O-35146_P
96783-B1	Method Blank	Total/NA	water	625 - PAH Only	O-35146_P
96783-BS1	Lab Control Sample	Total/NA	water	625 - PAH Only	O-35146_P
96783-BS2	Lab Control Sample Dup	Total/NA	water	625 - PAH Only	O-35146_P
380-1269-1 MS	DH43-1	Total/NA	Water	625 - PAH Only	O-35146_P
380-1269-1 MSD	DH43-1	Total/NA	Water	625 - PAH Only	O-35146_P

Analysis Batch: 22DSE013W

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-1	DH43-1	Total/NA	Water	TPH 815 Diesel and Motor Oil	
380-1269-2	DH43-2	Total/NA	Water	TPH 815 Diesel and Motor Oil	
380-1269-3	DH43-3	Total/NA	Water	TPH 815 Diesel and Motor Oil	
380-1269-4	DH43-4	Total/NA	Water	TPH 815 Diesel and Motor Oil	
380-1269-5	DH43-5	Total/NA	Water	TPH 815 Diesel and Motor Oil	
22DSE013WB	Method Blank	Total/NA	WATER	TPH 815 Diesel and Motor Oil	
22DSE013WL	Lab Control Sample	Total/NA	WATER	TPH 815 Diesel and Motor Oil	
22J5E013WL	Lab Control Sample	Total/NA	WATER	TPH 815 Diesel and Motor Oil	
22J8E013WL	Lab Control Sample	Total/NA	WATER	TPH 815 Diesel and Motor Oil	

Analysis Batch: 22VGH7E03

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-1	DH43-1	Total/NA	Water	8015 GRO	
380-1269-2	DH43-2	Total/NA	Water	8015 GRO	
380-1269-3	DH43-3	Total/NA	Water	8015 GRO	
380-1269-4	DH43-4	Total/NA	Water	8015 GRO	

Subcontract (Continued)

Analysis Batch: 22VGH7E03 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-5	DH43-5	Total/NA	Water	8015 GRO	
380-1269-6	TRAVEL BLANK	Total/NA	Water	8015 GRO	
22VGH7E03B	Method Blank	Total/NA	WATER	8015 GRO	
22VGH7E03L	Lab Control Sample	Total/NA	WATER	8015 GRO	
380-1269-1 MS	DH43-1	Total/NA	Water	TPH 815 Diesel and Motor Oil	
380-1269-1 MSD	DH43-1	Total/NA	Water	8015 GRO	

Prep Batch: O-35146_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
380-1269-1	DH43-1	Total/NA	Water	EPA 625	
380-1269-2	DH43-2	Total/NA	Water	EPA 625	
380-1269-3	DH43-3	Total/NA	Water	EPA 625	
380-1269-4	DH43-4	Total/NA	Water	EPA 625	
380-1269-5	DH43-5	Total/NA	Water	EPA 625	
96783-B1	Method Blank	Total/NA	water	EPA 625	
96783-BS1	Lab Control Sample	Total/NA	water	EPA 625	
96783-BS2	Lab Control Sample Dup	Total/NA	water	EPA 625	
380-1269-1 MS	DH43-1	Total/NA	Water	EPA 625	
380-1269-1 MSD	DH43-1	Total/NA	Water	EPA 625	

Lab Chronicle

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

Job ID: 380-1269-1

Client Sample ID: DH43-1
Date Collected: 05/03/22 12:08
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 00:17	N1A	ECL 4
Total/NA	Prep	EPA 625		1	O-35146_P	05/07/22 00:00		
Total/NA	Analysis	625 - PAH Only		1	O-35146	05/14/22 12:49	YC	
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 01:55	SCerva	
Total/NA	Analysis	TPH 815 Diesel and Motor Oil		1	22DSE013W	05/10/22 22:14	SDees	

Client Sample ID: DH43-2
Date Collected: 05/03/22 13:45
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 00:37	N1A	ECL 4
Total/NA	Prep	EPA 625		1	O-35146_P	05/07/22 00:00		
Total/NA	Analysis	625 - PAH Only		1	O-35146	05/14/22 19:47	YC	
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 03:37	SCerva	
Total/NA	Analysis	TPH 815 Diesel and Motor Oil		1	22DSE013W	05/10/22 22:33	SDees	

Client Sample ID: DH43-3
Date Collected: 05/03/22 15:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 00:57	N1A	ECL 4
Total/NA	Prep	EPA 625		1	O-35146_P	05/07/22 00:00		
Total/NA	Analysis	625 - PAH Only		1	O-35146	05/14/22 21:30	YC	
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 04:11	SCerva	
Total/NA	Analysis	TPH 815 Diesel and Motor Oil		1	22DSE013W	05/10/22 22:51	SDees	

Client Sample ID: DH43-4
Date Collected: 05/03/22 16:15
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 01:17	N1A	ECL 4
Total/NA	Prep	EPA 625		1	O-35146_P	05/07/22 00:00		
Total/NA	Analysis	625 - PAH Only		1	O-35146	05/14/22 23:14	YC	
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 04:45	SCerva	
Total/NA	Analysis	TPH 815 Diesel and Motor Oil		1	22DSE013W	05/10/22 23:09	SDees	

Lab Chronicle

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

Job ID: 380-1269-1

Client Sample ID: DH43-5

Date Collected: 05/03/22 16:50
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 01:37	N1A	ECL 4
Total/NA	Prep	EPA 625		1	O-35146_P	05/07/22 00:00		
Total/NA	Analysis	625 - PAH Only		1	O-35146	05/15/22 00:57	YC	
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 05:19	SCerva	
Total/NA	Analysis	TPH 815 Diesel and Motor Oil		1	22DSE013W	05/10/22 23:28	SDees	

Client Sample ID: TRAVEL BLANK

Date Collected: 05/03/22 00:00
Date Received: 05/05/22 11:30

Lab Sample ID: 380-1269-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	233824	05/13/22 01:57	N1A	ECL 4
Total/NA	Analysis	8015 GRO		1	22VGH7E03	05/07/22 05:53	SCerva	

Laboratory References:

= Physis Environmental Laboratories, 1904 Wright Circle, Anaheim, CA 92806

ECL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

Accreditation/Certification Summary

Client: City & County of Honolulu
Job ID: 380-1269-1
Project/Site: INTERA - Red-Hill-Incident

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
California	Los Angeles County Sanitation Districts	10109	09-30-22
California	SCAQMD LAP	17LA0919	12-01-22
California	State	2944	09-30-22
Guam	State	21-003R	06-22-22
Nevada	State	CA00111	07-31-22
Oregon	NELAP	4175	01-31-23
USDA	US Federal Programs	P330-20-00034	02-10-23
Washington	State	C916-18	10-12-22

Method Summary

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

Job ID: 380-1269-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	ECL 4
625	EPA 625 Base/Neutral and Acid Organics i	EPA	
8015	8015 - Jet Fuel 5 (JP5)	EPA	
8015	8015 - Jet Fuel 8 (JP8)	EPA	
8015	8015 - TPH DRO/ORO	EPA	
8015B	SW846 8015B Gasoline Range Organics	SW846	
5030C	Purge and Trap	SW846	ECL 4

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

= Physis Environmental Laboratories, 1904 Wright Circle, Anaheim, CA 92806

ECL 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: 380-1269-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
380-1269-1	DH43-1	Water	05/03/22 12:08	05/05/22 11:30
380-1269-2	DH43-2	Water	05/03/22 13:45	05/05/22 11:30
380-1269-3	DH43-3	Water	05/03/22 15:00	05/05/22 11:30
380-1269-4	DH43-4	Water	05/03/22 16:15	05/05/22 11:30
380-1269-5	DH43-5	Water	05/03/22 16:50	05/05/22 11:30
380-1269-6	TRAVEL BLANK	Water	05/03/22 00:00	05/05/22 11:30

EMAX LABORATORIES, INC.
3051 Fujita Street
Torrance, CA 90505
Tel: (310)-618-8889

Date: 05-18-2022
EMAX Batch No.: 22E079

Attn: Jackie Contreras

Eurofins Eaton Analytical
750 Royal Oaks Dr., Suite 100
Monrovia, CA 91016-3629

Subject: Laboratory Report
Project: 38000861

Enclosed is the Laboratory report for samples received on 05/06/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
380-1269-1	E079-01	05/03/22	WATER	TPH GASOLINE
				TPH
380-1269-2	E079-02	05/03/22	WATER	TPH GASOLINE
				TPH
380-1269-3	E079-03	05/03/22	WATER	TPH GASOLINE
				TPH
380-1269-4	E079-04	05/03/22	WATER	TPH GASOLINE
				TPH
380-1269-5	E079-05	05/03/22	WATER	TPH GASOLINE
				TPH
380-1269-6	E079-06	05/03/22	WATER	TPH GASOLINE

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning
these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director

EMAX certifies that results included in this report meets all TNI & DOD requirements unless noted in the Case Narrative.

NELAP Accredited Certificate Number CA002912021-19
ANAB Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing
California ELAP Accredited Certificate Number 2672

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone: 626-386-1100

Chain of Custody Record

22E079

eurofins | Environment Testing America

6/26/2022

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Frank, Debbie L	Carrier Tracking No(s):	COC No: 380-571.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Debbie.Frank@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: EMAX Laboratories Inc		Accreditations Required (See note): State - Hawaii		Job #: 380-1269-1
Address: 3051 Fujita Street, ,	Due Date Requested: 5/12/2022			
City: Torrance	TAT Requested (days):			
State, Zip: CA, 90505				
Phone:	PO #:			
Email:	WO #:			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu Compliance	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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	Z - other (specify)

Other:

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)	SUB (TPH 815 Diesel and Motor Oil)/ TPH 815 Diesel and Motor Oil	SUB (TPH 8015 Jet Fuel 5)/ TPH 8015 Jet Fuel 5	SUB (TPH 8015 Jet Fuel 8)/ TPH 8015 Jet Fuel 8	SUB (8015 GRO)/ 8015 GRO	Total Number of containers	Special Instructions/Note:
			Preservation Code:									
1 DH43-1 (380-1269-1)	5/3/22	12:08 Hawaiian		Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
DH43-1 (380-1269-1M S)	5/3/22	12:08 Hawaiian	MS	Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
DH43-1 (380-1269-1M SD)	5/3/22	12:08 Hawaiian	MSD	Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
2 DH43-2 (380-1269-2)	5/3/22	13:45 Hawaiian		Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
3 DH43-3 (380-1269-3)	5/3/22	15:00 Hawaiian		Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
4 DH43-4 (380-1269-4)	5/3/22	16:15 Hawaiian		Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
5 DH43-5 (380-1269-5)	5/3/22	16:50 Hawaiian		Water			X	X	X	X	6	TPH 815 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8
6 TRAVEL BLANK (380-1269-6)	5/3/22	Hawaiian		Water						X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon out 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 complicance to Eurofins Eaton Analytical, LLC.

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

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

Relinquished by:	Date/Time: 5/6/22 1135	Company: EEA	Received by:	Date/Time: 5/6/22 11:35	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: Temp: ① 1.8/2.0 ② 1.3/1.5 ③ 1.8/2.0

Page 56 of 159

Shipping Order Form

eurofins | Environment Testing America

S380-3663

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone (626) 386-1100

6/26/2022

Shipping Order ID: 3663 | **Ship Via: FedEx** | **Due On: 5/6/2022 11:59:00PM**

Ship To Information

Project Manager:

Company Name: EMAX Laboratories Inc
Attention: Shipping/Receiving
Address 1: 3051 Fujita Street
Address 2:
Address 3:
City: Torrance
State: CA
Zip: 90505
Phone #:
Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☑ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Priority
- ☐ Return Shipment Labels
  - ☐ Prepaid Return
  - Monrovia, CA (Suite 100)
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Page 57 of 159

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 5/5/2022
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***5/6/2022 11:59:00PM***
Lab Project Number:
PWSID:

Order Completion Information

Creator: Joseph Sanchez
Filled by:
Sent Date:
Sent Via:
Tracking #:

6/26/2022

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Page 59 of 159

Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

EMAX LABORATORIES, INC.

REFERENCE: EMAX-SM02 Rev. 12

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 22E079
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient JHOWIN zamora
☐ EMAX Courier ☑ Client Delivery		Date 5/6/22 Time 11:38

COC INSPECTION

☑ Client Name	☑ Client PM/FC	☐ Sampler Name	☑ Sampling Date/Time	☑ Sample ID	☑ Matrix
☑ Address	☐ Tel # / Fax #	☑ Courier Signature	☑ Analysis Required	☐ Preservative (if any)	☐ TAT
Safety Issues (if any)	☐ High concentrations expected	☐ From Superfund Site	☐ Rad screening required		

Note:

PACKAGING INSPECTION

Container	☑ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool, ≤6 °C but not frozen)	☑ Cooler 1 1.8/2.0 °C	☑ Cooler 2 1.3/1.5 °C	☑ Cooler 3 1.8/2.0 °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Thermometer:	(A) S/N 210583479	B - S/N _____	C - S/N 210271399	D - S/N _____	

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1,2,3,5		D8	JP8	R8
1,2,3,5		D9	PAH-625	↓
6	40,41	D22	4/15/22 + 5/3/22	R1

5/6/22

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. NB 5/6/22

NOTES/OBSERVATIONS:

SAMPLE MATRIX IS DRINKING WATER? ☐ YES ☐ NO

LEGEND:

☐ **Continue to next page.**

Code	Description- Sample Management	Code	Description-Sample Management	Code	Description-Sample Management
D1	Analysis is not indicated in _____	D13	Out of Holding Time	R1	Proceed as indicated in ☑ COC ☐ Label
D2	Analysis mismatch COC vs label	D14	Bubble is >6mm	R2	Refer to attached instruction
D3	Sample ID mismatch COC vs label	D15	No trip blank in cooler	R3	Cancel the analysis
D4	Sample ID is not indicated in _____	D16	Preservation not indicated in _____	R4	Use vial with smallest bubble first
D5	Containcr -[improper] [leaking] [broken]	D17	Preservation mismatch COC vs label	R5	Log-in with latest sampling date and time+1 min
D6	Date/Time is not indicated in _____	D18	Insufficient chemical prescrvative	R6	Adjust pH as necessary
D7	Date/Time mismatch COC vs label	D19	Insufficient Sample	R7	Filter and preserved as necessary
(D8)	Sample listed in COC is not received	D20	No filtration info for dissolved analysis	R8	Informed Client
(D9)	Sample received is not listed in COC	D21	No sample for moisture determination	R9	
D10	No initial/date on corrections in COC/label	(D22)	Two dates	R10	
D11	Container count mismatch COC vs received	D23		R11	
D12	Container size mismatch COC vs received	D24		R12	

REVIEWS:

Sample Labeling JHOWIN zamora Date 5/6/22 5/6/22

SRF Date 5/6/22

PM NB Date 5/6/22

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range or estimated value.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

38000861

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

SDG#: 22E079

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 38000861

SDG : 22E079

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

A total of six(6) water samples were received on 05/06/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VGH7E03B - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of LCS/LCD was analyzed. VGH7E03L/VGH7E03C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Gasoline was within MS QC limits in E079-01M/E079-01S. Refer to Matrix QC summary form for details.

Surrogate
Surrogate was added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : EUROFINS EATON ANALYTICAL
Project : 38000861

SDG NO. : 22E079
Instrument ID : H7

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VGH7E03B	1	NA	05/06/2216:47	05/06/2216:47	AE06005A	AE06004A	22VGH7E03	Method Blank
LCS1W	VGH7E03L	1	NA	05/06/2217:21	05/06/2217:21	AE06006A	AE06004A	22VGH7E03	Lab Control Sample (LCS)
LCD1W	VGH7E03C	1	NA	05/06/2217:55	05/06/2217:55	AE06007A	AE06004A	22VGH7E03	LCS Duplicate
380-1269-1	E079-01	1	NA	05/07/2201:55	05/07/2201:55	AE06021A	AE06018A	22VGH7E03	Field Sample
380-1269-1MS	E079-01M	1	NA	05/07/2202:29	05/07/2202:29	AE06022A	AE06018A	22VGH7E03	Matrix Spike Sample (MS)
380-1269-1MSD	E079-01S	1	NA	05/07/2203:03	05/07/2203:03	AE06023A	AE06018A	22VGH7E03	MS Duplicate (MSD)
380-1269-2	E079-02	1	NA	05/07/2203:37	05/07/2203:37	AE06024A	AE06018A	22VGH7E03	Field Sample
380-1269-3	E079-03	1	NA	05/07/2204:11	05/07/2204:11	AE06025A	AE06018A	22VGH7E03	Field Sample
380-1269-4	E079-04	1	NA	05/07/2204:45	05/07/2204:45	AE06026A	AE06018A	22VGH7E03	Field Sample
380-1269-5	E079-05	1	NA	05/07/2205:19	05/07/2205:19	AE06027A	AE06018A	22VGH7E03	Field Sample
380-1269-6	E079-06	1	NA	05/07/2205:53	05/07/2205:53	AE06028A	AE06018A	22VGH7E03	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 12:08
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 01:55
Sample ID	: 380-1269-1	Date Analyzed:	05/07/22 01:55
Lab Samp ID:	E079-01	Dilution Factor:	1
Lab File ID:	AE06021A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0369	0.0400	92	60-140

Notes:

Parameter	H-C Range
Gasoline	C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 5ml	Final Volume :	5ml
Prepared by	: SCerva	Analyzed by :	SCerva

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 13:45
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 03:37
Sample ID	: 380-1269-2	Date Analyzed:	05/07/22 03:37
Lab Samp ID:	E079-02	Dilution Factor:	1
Lab File ID:	AE06024A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0368	0.0400	92	60-140

Notes:

Parameter	H-C Range
Gasoline	C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 5ml	Final Volume	: 5ml
Prepared by	: SCerva	Analyzed by	: SCerva

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 15:00
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 04:11
Sample ID	: 380-1269-3	Date Analyzed:	05/07/22 04:11
Lab Samp ID:	E079-03	Dilution Factor:	1
Lab File ID:	AE06025A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0359	0.0400	90	60-140

Notes:

Parameter	H-C Range
Gasoline	C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 5ml	Final Volume :	5ml
Prepared by	: SCerva	Analyzed by :	SCerva

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:15
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 04:45
Sample ID	: 380-1269-4	Date Analyzed:	05/07/22 04:45
Lab Samp ID:	E079-04	Dilution Factor:	1
Lab File ID:	AE06026A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0367	0.0400	92	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : SCerva Analyzed by : SCerva

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:50
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 05:19
Sample ID	: 380-1269-5	Date Analyzed:	05/07/22 05:19
Lab Samp ID:	E079-05	Dilution Factor:	1
Lab File ID:	AE06027A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0389	0.0400	97	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : SCerva Analyzed by : SCerva

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 00:00
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/07/22 05:53
Sample ID	: 380-1269-6	Date Analyzed:	05/07/22 05:53
Lab Samp ID:	E079-06	Dilution Factor:	1
Lab File ID:	AE06028A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06018A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0372	0.0400	93	60-140

Notes:

Parameter	H-C Range
Gasoline	C6-C10

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 5ml	Final Volume :	5ml
Prepared by	: SCerva	Analyzed by :	SCerva

QC SUMMARIES

METHOD 5030B/8015B
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/06/22 16:47
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/06/22 16:47
Sample ID	: MBLK1W	Date Analyzed:	05/06/22 16:47
Lab Samp ID:	VGH7E03B	Dilution Factor:	1
Lab File ID:	AE06005A	Matrix:	WATER
Ext Btch ID:	22VGH7E03	% Moisture:	NA
Calib. Ref.:	AE06004A	Instrument ID:	H7

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
GASOLINE	ND	0.020	0.010

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0399	0.0400	100	60-140

Notes:
Parameter H-C Range
Gasoline C6-C10
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 5ml Final Volume : 5ml
Prepared by : SCerva Analyzed by : SCerva

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38000861
BATCH NO. : 22E079
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VGH7E03B	VGH7E03L	VGH7E03C
LAB FILE ID	: AE06005A	AE06006A	AE06007A
DATE PREPARED	: 05/06/22 16:47	05/06/22 17:21	05/06/22 17:55
DATE ANALYZED	: 05/06/22 16:47	05/06/22 17:21	05/06/22 17:55
PREP BATCH	: 22VGH7E03	22VGH7E03	22VGH7E03
CALIBRATION REF	: AE06004A	AE06004A	AE06004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.486	97	0.500	0.486	97	0	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0473	118	0.0400	0.0465	116	70-130

MB: Method Blank sample LCS: Lab Control Sample LCD: Lab Control Sample Duplicate

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38000861
BATCH NO. : 22E079
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-1269-1	380-1269-1MS	380-1269-1MSD
LAB SAMPLE ID	: E079-01	E079-01M	E079-01S
LAB FILE ID	: AE06021A	AE06022A	AE06023A
DATE PREPARED	: 05/07/22 01:55	05/07/22 02:29	05/07/22 03:03
DATE ANALYZED	: 05/07/22 01:55	05/07/22 02:29	05/07/22 03:03
PREP BATCH	: 22VGH7E03	22VGH7E03	22VGH7E03
CALIBRATION REF	: AE06018A	AE06018A	AE06018A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Gasoline	ND	0.500	0.462	92	0.500	0.435	87	6	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0429	107	0.0400	0.0430	108	60-140

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

38000861

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22E079

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 38000861

SDG : 22E079

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of five(5) water samples were received on 05/06/22 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSE013WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSE013WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 22E049-05M/22E049-05S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met. Samples E079-01, -02, -03, and -04 displayed a heavier fuel pattern.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 38000861

SDG : 22E079

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of five(5) water samples were received on 05/06/22 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSE013WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP5 was within LCS QC limits in J5E013WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22E049-05M/22E049-05S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 38000861

SDG : 22E079

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of five(5) water samples were received on 05/06/22 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. Refer to MRL summary form for details.

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSE013WB - result was compliant to project requirement. Refer to sample result summary form for details.

Lab Control Sample
Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP8 was within LCS QC limits in J8E013WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22E049-05M/22E049-05S. Refer to Matrix QC summary form for details.

Surrogate
Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis
Samples were analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 38000861

SDG NO. : 22E079
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSE013WB	1	NA	05/10/2215:29	05/09/2211:30	LE10010A	LE10004A	22DSE013W	Method Blank
LCS1W	DSE013WL	1	NA	05/10/2215:48	05/09/2211:30	LE10011A	LE10004A	22DSE013W	Lab Control Sample (LCS)
380-1269-1	E079-01	1	NA	05/10/2222:14	05/09/2211:30	LE10032A	LE10025A	22DSE013W	Field Sample
380-1269-2	E079-02	1	NA	05/10/2222:33	05/09/2211:30	LE10033A	LE10025A	22DSE013W	Field Sample
380-1269-3	E079-03	1	NA	05/10/2222:51	05/09/2211:30	LE10034A	LE10025A	22DSE013W	Field Sample
380-1269-4	E079-04	1	NA	05/10/2223:09	05/09/2211:30	LE10035A	LE10025A	22DSE013W	Field Sample
380-1269-5	E079-05	1	NA	05/10/2223:28	05/09/2211:30	LE10036A	LE10025A	22DSE013W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 38000861

SDG NO. : 22E079
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSE013WB	1	NA	05/10/2215:29	05/09/2211:30	LE10010A	LE10005A	22DSE013W	Method Blank
LCS1W	J5E013WL	1	NA	05/10/2216:06	05/09/2211:30	LE10012A	LE10005A	22DSE013W	Lab Control Sample (LCS)
380-1269-1	E079-01	1	NA	05/10/2222:14	05/09/2211:30	LE10032A	LE10026A	22DSE013W	Field Sample
380-1269-2	E079-02	1	NA	05/10/2222:33	05/09/2211:30	LE10033A	LE10026A	22DSE013W	Field Sample
380-1269-3	E079-03	1	NA	05/10/2222:51	05/09/2211:30	LE10034A	LE10026A	22DSE013W	Field Sample
380-1269-4	E079-04	1	NA	05/10/2223:09	05/09/2211:30	LE10035A	LE10026A	22DSE013W	Field Sample
380-1269-5	E079-05	1	NA	05/10/2223:28	05/09/2211:30	LE10036A	LE10026A	22DSE013W	Field Sample

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 38000861
SDG NO. : 22E079
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSE013WB	1	NA	05/10/2215:29	05/09/2211:30	LE10010A	LE10006A	22DSE013W	Method Blank
LCS1W	J8E013WL	1	NA	05/10/2216:25	05/09/2211:30	LE10013A	LE10006A	22DSE013W	Lab Control Sample (LCS)
380-1269-1	E079-01	1	NA	05/10/2222:14	05/09/2211:30	LE10032A	LE10027A	22DSE013W	Field Sample
380-1269-2	E079-02	1	NA	05/10/2222:33	05/09/2211:30	LE10033A	LE10027A	22DSE013W	Field Sample
380-1269-3	E079-03	1	NA	05/10/2222:51	05/09/2211:30	LE10034A	LE10027A	22DSE013W	Field Sample
380-1269-4	E079-04	1	NA	05/10/2223:09	05/09/2211:30	LE10035A	LE10027A	22DSE013W	Field Sample
380-1269-5	E079-05	1	NA	05/10/2223:28	05/09/2211:30	LE10036A	LE10027A	22DSE013W	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 12:08
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-1	Date Analyzed:	05/10/22 22:14
Lab Samp ID	: 22E079-01	Dilution Factor:	1
Lab File ID	: LE10032A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10025A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.026	0.013
Motor Oil	0.43	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.468	0.520	90	60-130
Hexacosane	0.138	0.130	106	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 960ml	Final Volume :	5ml
Prepared by	: POreto	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 12:08
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-1	Date Analyzed:	05/10/22 22:14
Lab Samp ID:	22E079-01	Dilution Factor:	1
Lab File ID:	LE10032A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10026A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.468	0.520	90	60-130
Hexacosane	0.138	0.130	106	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP5 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 960ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 12:08
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-1	Date Analyzed:	05/10/22 22:14
Lab Samp ID:	22E079-01	Dilution Factor:	1
Lab File ID:	LE10032A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10027A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.468	0.520	90	60-130
Hexacosane	0.138	0.130	106	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP8	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 960ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 13:45
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-2	Date Analyzed:	05/10/22 22:33
Lab Samp ID	: 22E079-02	Dilution Factor:	1
Lab File ID	: LE10033A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10025A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.027	0.013
Motor Oil	0.24	0.053	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.501	0.530	95	60-130
Hexacosane	0.134	0.132	101	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 940ml	Final Volume :	5ml
Prepared by	: POreto	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 13:45
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-2	Date Analyzed:	05/10/22 22:33
Lab Samp ID	: 22E079-02	Dilution Factor:	1
Lab File ID	: LE10033A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10026A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.053	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.501	0.530	95	60-130
Hexacosane	0.134	0.132	101	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP5	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 940ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 13:45
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-2	Date Analyzed:	05/10/22 22:33
Lab Samp ID:	22E079-02	Dilution Factor:	1
Lab File ID:	LE10033A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10027A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.053	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.501	0.530	95	60-130
Hexacosane	0.134	0.132	101	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 940ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 15:00
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-3	Date Analyzed:	05/10/22 22:51
Lab Samp ID:	22E079-03	Dilution Factor:	1
Lab File ID:	LE10034A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10025A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.026	0.013
Motor Oil	0.061	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.452	0.515	88	60-130
Hexacosane	0.133	0.129	103	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 970ml	Final Volume	: 5ml
Prepared by	: POreto	Analyzed by	: SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 15:00
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-3	Date Analyzed:	05/10/22 22:51
Lab Samp ID:	22E079-03	Dilution Factor:	1
Lab File ID:	LE10034A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10026A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.452	0.515	88	60-130
Hexacosane	0.133	0.129	103	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP5	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 970ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 15:00
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-3	Date Analyzed:	05/10/22 22:51
Lab Samp ID:	22E079-03	Dilution Factor:	1
Lab File ID:	LE10034A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10027A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.052	0.026

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.452	0.515	88	60-130
Hexacosane	0.133	0.129	103	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 970ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:15
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-4	Date Analyzed:	05/10/22 23:09
Lab Samp ID	: 22E079-04	Dilution Factor:	1
Lab File ID	: LE10035A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10025A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.013
Motor Oil	0.061	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.479	0.510	94	60-130
Hexacosane	0.136	0.127	107	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 980ml	Final Volume	: 5ml
Prepared by	: POreto	Analyzed by	: SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:15
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-4	Date Analyzed:	05/10/22 23:09
Lab Samp ID:	22E079-04	Dilution Factor:	1
Lab File ID:	LE10035A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10026A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.479	0.510	94	60-130
Hexacosane	0.136	0.127	107	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP5	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 980ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:15
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-4	Date Analyzed:	05/10/22 23:09
Lab Samp ID	: 22E079-04	Dilution Factor:	1
Lab File ID	: LE10035A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10027A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.479	0.510	94	60-130
Hexacosane	0.136	0.127	107	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 980ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:50
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-5	Date Analyzed:	05/10/22 23:28
Lab Samp ID:	22E079-05	Dilution Factor:	1
Lab File ID:	LE10036A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10025A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.027	0.014
Motor Oil	ND	0.054	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.525	0.540	97	60-130
Hexacosane	0.141	0.135	104	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount	: 930ml	Final Volume :	5ml
Prepared by	: POreto	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:50
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-5	Date Analyzed:	05/10/22 23:28
Lab Samp ID:	22E079-05	Dilution Factor:	1
Lab File ID:	LE10036A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10026A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.054	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.525	0.540	97	60-130
Hexacosane	0.141	0.135	104	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP5	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 930ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/03/22 16:50
Project	: 38000861	Date Received:	05/06/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: 380-1269-5	Date Analyzed:	05/10/22 23:28
Lab Samp ID:	22E079-05	Dilution Factor:	1
Lab File ID:	LE10036A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10027A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.054	0.027

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.525	0.540	97	60-130
Hexacosane	0.141	0.135	104	60-130

Notes:
RL : Reporting Limit
Parameter H-C Range
JP8 C8-C18
Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 930ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/09/22 11:30
Project	: 38000861	Date Received:	05/09/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: MBLK1W	Date Analyzed:	05/10/22 15:29
Lab Samp ID	: DSE013WB	Dilution Factor:	1
Lab File ID	: LE10010A	Matrix:	WATER
Ext Btch ID	: 22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10004A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.012
Motor Oil	ND	0.050	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.487	0.500	97	60-130
Hexacosane	0.123	0.125	99	60-130

Notes:

Parameter	H-C Range
Diesel	C10-C24
Motor Oil	C24-C36

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 1000ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38000861
BATCH NO. : 22E079
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSE013WB	DSE013WL
LAB FILE ID	: LE10010A	LE10011A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 15:29	05/10/22 15:48
PREP BATCH	: 22DSE013W	22DSE013W
CALIBRATION REF	: LE10004A	LE10004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.45	98	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.518	104	60-130
Hexacosane	0.125	0.128	102	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38001111
BATCH NO. : 22E049
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: 380-1130-1	380-1130-1MS	380-1130-1MSD
LAB SAMPLE ID	: 22E049-05	22E049-05M	22E049-05S
LAB FILE ID	: LE10016A	LE10017A	LE10018A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 17:20	05/10/22 17:39	05/10/22 17:57
PREP BATCH	: 22DSE013W	22DSE013W	22DSE013W
CALIBRATION REF:	LE10004A	LE10004A	LE10004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.40	2.40	100	2.40	2.30	96	4	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.480	0.480	100	0.480	0.486	101	60-130
Hexacosane	0.120	0.120	100	0.120	0.125	104	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/09/22 11:30
Project	: 38000861	Date Received:	05/09/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: MBLK1W	Date Analyzed:	05/10/22 15:29
Lab Samp ID:	DSE013WB	Dilution Factor:	1
Lab File ID:	LE10010A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.050	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.487	0.500	97	60-130
Hexacosane	0.123	0.125	99	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP5	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 1000ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38000861
BATCH NO. : 22E079
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSE013WB	J5E013WL
LAB FILE ID	: LE10010A	LE10012A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 15:29	05/10/22 16:06
PREP BATCH	: 22DSE013W	22DSE013W
CALIBRATION REF	: LE10005A	LE10005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.30	92	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.539	108	60-130
Hexacosane	0.125	0.125	100	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38001111
BATCH NO. : 22E049
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: 380-1130-1	380-1130-1MS	380-1130-1MSD
LAB SAMPLE ID	: 22E049-05	22E049-05M	22E049-05S
LAB FILE ID	: LE10016A	LE10019A	LE10020A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 17:20	05/10/22 18:16	05/10/22 18:34
PREP BATCH	: 22DSE013W	22DSE013W	22DSE013W
CALIBRATION REF:	LE10005A	LE10005A	LE10005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.88	2.51	87	2.88	2.78	97	10	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.575	0.609	106	0.575	0.608	106	60-130
Hexacosane	0.144	0.149	104	0.144	0.140	97	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	05/09/22 11:30
Project	: 38000861	Date Received:	05/09/22
Batch No.	: 22E079	Date Extracted:	05/09/22 11:30
Sample ID	: MBLK1W	Date Analyzed:	05/10/22 15:29
Lab Samp ID:	DSE013WB	Dilution Factor:	1
Lab File ID:	LE10010A	Matrix:	WATER
Ext Btch ID:	22DSE013W	% Moisture:	NA
Calib. Ref.:	LE10006A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.050	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.487	0.500	97	60-130
Hexacosane	0.123	0.125	99	60-130

Notes:
RL : Reporting Limit

Parameter	H-C Range
JP8	C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.
Sample Amount : 1000ml Final Volume : 5ml
Prepared by : POreto Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38000861
BATCH NO. : 22E079
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSE013WB	J8E013WL
LAB FILE ID	: LE10010A	LE10013A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 15:29	05/10/22 16:25
PREP BATCH	: 22DSE013W	22DSE013W
CALIBRATION REF	: LE10006A	LE10006A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.29	92	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.507	101	60-130
Hexacosane	0.125	0.129	103	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 38001111
BATCH NO. : 22E049
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 380-1130-1	380-1130-1MS	380-1130-1MSD
LAB SAMPLE ID	: 22E049-05	22E049-05M	22E049-05S
LAB FILE ID	: LE10016A	LE10021A	LE10022A
DATE PREPARED	: 05/09/22 11:30	05/09/22 11:30	05/09/22 11:30
DATE ANALYZED	: 05/10/22 17:20	05/10/22 18:52	05/10/22 19:11
PREP BATCH	: 22DSE013W	22DSE013W	22DSE013W
CALIBRATION REF	: LE10006A	LE10006A	LE10006A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.65	2.48	94	2.62	2.76	105	11	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.530	0.537	101	0.525	0.548	104	60-130
Hexacosane	0.132	0.137	103	0.131	0.130	99	60-130

PS: Parent Sample MS: Matrix Spike MSD: Matrix Spike Duplicate

May 20, 2022

Debbie Frank
Eurofins Eaton Analytical
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016-

Project Name: INTERA - Red-Hill-Incident
Physis Project ID: 1407003-241

Dear Debbie,

Enclosed are the analytical results for samples submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 5/6/2022. A total of 5 samples were received for analysis in accordance with the attached chain of custody (COC). Per the COC, the samples were analyzed for:

Organics
Polynuclear Aromatic Hydrocarbons by EPA 625.1
Disalicylidenepropanediamine by EPA 625.1
Dibenzo [a,l] Pyrene w/ PAHs by EPA 625.1

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Rachel Hansen
714 602-5320
Extension 203
rachelhansen@physislabs.com

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-241

INTERA - Red-Hill-Incident

Total Samples: 5

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
96784	DH43-1 (380-1269-1)		5/3/2022	12:08	Samplewater	Not Specified
96785	DH43-2 (380-1269-2)		5/3/2022	13:45	Samplewater	Not Specified
96786	DH43-3 (380-1269-3)		5/3/2022	15:00	Samplewater	Not Specified
96787	DH43-4 (380-1269-4)		5/3/2022	16:15	Samplewater	Not Specified
96788	DH43-5 (380-1269-5)		5/3/2022	16:50	Samplewater	Not Specified

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS1/MS2, BS1/BS2, LCS1/LCS2, LCM1/LCM2, CRM1/CRM2, surrogate spikes and/or replicate project sample analysis (R1/R2) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MD
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

1904 E. Wright Circle Anaheim, CA 92806 (714) 602-5320 fax (714) 602-5321 www.physislabs.com CA ELAP #2769

ANALYTICAL REPORT

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 96784-R1	**DH43-1 (380-1269-1)**		**Matrix: Samplewater**				**Sampled: 03-May-22 12:08**			**Received: 06-May-22**	
(d10-Acenaphthene)	EPA 625.1	% Recovery	87	1			Total		O-35146	07-May-22	14-May-22
(d10-Phenanthrene)	EPA 625.1	% Recovery	93	1			Total		O-35146	07-May-22	14-May-22
(d12-Chrysene)	EPA 625.1	% Recovery	86	1			Total		O-35146	07-May-22	14-May-22
(d12-Perylene)	EPA 625.1	% Recovery	102	1			Total		O-35146	07-May-22	14-May-22
(d8-Naphthalene)	EPA 625.1	% Recovery	75	1			Total		O-35146	07-May-22	14-May-22
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[e]pyrene	EPA 625.1	µg/L	0.0103	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[g,h,i]perylene	EPA 625.1	µg/L	0.00971	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35146	07-May-22	14-May-22
Fluoranthene	EPA 625.1	µg/L	0.00589	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Phenanthrene	EPA 625.1	µg/L	0.00746	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Pyrene	EPA 625.1	µg/L	0.00787	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 96785-R1	**DH43-2 (380-1269-2)**		**Matrix: Samplewater**				**Sampled: 03-May-22 13:45**			**Received: 06-May-22**	
(d10-Acenaphthene)	EPA 625.1	% Recovery	87	1			Total		O-35146	07-May-22	14-May-22
(d10-Phenanthrene)	EPA 625.1	% Recovery	96	1			Total		O-35146	07-May-22	14-May-22
(d12-Chrysene)	EPA 625.1	% Recovery	88	1			Total		O-35146	07-May-22	14-May-22
(d12-Perylene)	EPA 625.1	% Recovery	105	1			Total		O-35146	07-May-22	14-May-22
(d8-Naphthalene)	EPA 625.1	% Recovery	75	1			Total		O-35146	07-May-22	14-May-22
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[b]fluoranthene	EPA 625.1	µg/L	0.00947	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[e]pyrene	EPA 625.1	µg/L	0.0399	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[g,h,i]perylene	EPA 625.1	µg/L	0.0371	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[k]fluoranthene	EPA 625.1	µg/L	0.0054	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Chrysene	EPA 625.1	µg/L	0.0109	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35146	07-May-22	14-May-22
Fluoranthene	EPA 625.1	µg/L	0.00694	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	0.0129	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Phenanthrene	EPA 625.1	µg/L	0.00696	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Pyrene	EPA 625.1	µg/L	0.00999	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 96786-R1	**DH43-3 (380-1269-3)**		**Matrix: Samplewater**				**Sampled: 03-May-22 15:00**			**Received:**	**06-May-22**
(d10-Acenaphthene)	EPA 625.1	% Recovery	89	1			Total		O-35146	07-May-22	14-May-22
(d10-Phenanthrene)	EPA 625.1	% Recovery	95	1			Total		O-35146	07-May-22	14-May-22
(d12-Chrysene)	EPA 625.1	% Recovery	88	1			Total		O-35146	07-May-22	14-May-22
(d12-Perylene)	EPA 625.1	% Recovery	106	1			Total		O-35146	07-May-22	14-May-22
(d8-Naphthalene)	EPA 625.1	% Recovery	78	1			Total		O-35146	07-May-22	14-May-22
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[b]fluoranthene	EPA 625.1	µg/L	0.00896	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[e]pyrene	EPA 625.1	µg/L	0.0373	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[g,h,i]perylene	EPA 625.1	µg/L	0.0337	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[k]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Chrysene	EPA 625.1	µg/L	0.00978	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35146	07-May-22	14-May-22
Fluoranthene	EPA 625.1	µg/L	0.00502	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	0.013	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Phenanthrene	EPA 625.1	µg/L	0.00559	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Pyrene	EPA 625.1	µg/L	0.00758	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 96787-R1	**DH43-4 (380-1269-4)**		**Matrix: Samplewater**				**Sampled: 03-May-22 16:15**			**Received: 06-May-22**	
(d10-Acenaphthene)	EPA 625.1	% Recovery	87	1			Total		O-35146	07-May-22	14-May-22
(d10-Phenanthrene)	EPA 625.1	% Recovery	92	1			Total		O-35146	07-May-22	14-May-22
(d12-Chrysene)	EPA 625.1	% Recovery	85	1			Total		O-35146	07-May-22	14-May-22
(d12-Perylene)	EPA 625.1	% Recovery	102	1			Total		O-35146	07-May-22	14-May-22
(d8-Naphthalene)	EPA 625.1	% Recovery	74	1			Total		O-35146	07-May-22	14-May-22
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[b]fluoranthene	EPA 625.1	µg/L	0.0101	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[e]pyrene	EPA 625.1	µg/L	0.0411	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[g,h,i]perylene	EPA 625.1	µg/L	0.0377	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Benzo[k]fluoranthene	EPA 625.1	µg/L	0.00564	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Chrysene	EPA 625.1	µg/L	0.0112	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35146	07-May-22	14-May-22
Fluoranthene	EPA 625.1	µg/L	0.00578	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	0.0142	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Phenanthrene	EPA 625.1	µg/L	0.00536	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22
Pyrene	EPA 625.1	µg/L	0.00801	1	0.001	0.005	Total		O-35146	07-May-22	14-May-22

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 96788-R1	**DH43-5 (380-1269-5)**		**Matrix: Samplewater**				**Sampled: 03-May-22 16:50**			**Received: 06-May-22**	
(d10-Acenaphthene)	EPA 625.1	% Recovery	87	1			Total		O-35146	07-May-22	15-May-22
(d10-Phenanthrene)	EPA 625.1	% Recovery	93	1			Total		O-35146	07-May-22	15-May-22
(d12-Chrysene)	EPA 625.1	% Recovery	89	1			Total		O-35146	07-May-22	15-May-22
(d12-Perylene)	EPA 625.1	% Recovery	103	1			Total		O-35146	07-May-22	15-May-22
(d8-Naphthalene)	EPA 625.1	% Recovery	74	1			Total		O-35146	07-May-22	15-May-22
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
1-Methylphenanthrene	EPA 625.1	µg/L	0.0109	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benz[a]anthracene	EPA 625.1	µg/L	0.00536	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benzo[a]pyrene	EPA 625.1	µg/L	0.0191	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benzo[b]fluoranthene	EPA 625.1	µg/L	0.0533	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benzo[e]pyrene	EPA 625.1	µg/L	0.213	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benzo[g,h,i]perylene	EPA 625.1	µg/L	0.195	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Benzo[k]fluoranthene	EPA 625.1	µg/L	0.0236	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Chrysene	EPA 625.1	µg/L	0.0506	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Dibenz[a,h]anthracene	EPA 625.1	µg/L	0.016	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22

PHYSIS Project ID: 1407003-241
Client: Eurofins Eaton Analytical
Project: INTERA - Red-Hill-Incident

Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35146	07-May-22	15-May-22
Fluoranthene	EPA 625.1	µg/L	0.0189	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	0.0782	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Naphthalene	EPA 625.1	µg/L	0.00694	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Phenanthrene	EPA 625.1	µg/L	0.0207	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22
Pyrene	EPA 625.1	µg/L	0.0265	1	0.001	0.005	Total		O-35146	07-May-22	15-May-22

QUALITY CONTROL REPORT

PHYSIS Project ID: 1407003-241
Client: Eurofins Eaton Analytical
Project: INTERA - Red-Hill-Incident

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 96783-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
		Method: EPA 625.1				Batch ID: O-35146		Prepared: 02-May-22				Analyzed: 14-May-22	
(d10-Acenaphthene)	Total	91	1			% Recovery	100	91		65 - 113%		PASS	
(d10-Phenanthrene)	Total	95	1			% Recovery	100	95		80 - 111%		PASS	
(d12-Chrysene)	Total	93	1			% Recovery	100	93		60 - 139%		PASS	
(d12-Perylene)	Total	89	1			% Recovery	100	89		36 - 161%		PASS	
(d8-Naphthalene)	Total	84	1			% Recovery	100	84		44 - 119%		PASS	
1-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
1-Methylphenanthrene	Total	ND	1	0.001	0.005	µg/L							
2,3,5-Trimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
2,6-Dimethylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
2-Methylnaphthalene	Total	ND	1	0.001	0.005	µg/L							
Acenaphthene	Total	ND	1	0.001	0.005	µg/L							
Acenaphthylene	Total	ND	1	0.001	0.005	µg/L							
Anthracene	Total	ND	1	0.001	0.005	µg/L							
Benz[a]anthracene	Total	ND	1	0.001	0.005	µg/L							
Benzo[a]pyrene	Total	ND	1	0.001	0.005	µg/L							
Benzo[b]fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Benzo[e]pyrene	Total	ND	1	0.001	0.005	µg/L							
Benzo[g,h,i]perylene	Total	ND	1	0.001	0.005	µg/L							
Benzo[k]fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Biphenyl	Total	ND	1	0.001	0.005	µg/L							
Chrysene	Total	ND	1	0.001	0.005	µg/L							
Dibenz[a,h]anthracene	Total	ND	1	0.001	0.005	µg/L							
Dibenzo[a,l]pyrene	Total	ND	1	0.001	0.005	µg/L							

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	ND	1	0.001	0.005	µg/L							
Disalicylidenepropanediamine	Total	ND	1	0.05	0.1	µg/L							
Fluoranthene	Total	ND	1	0.001	0.005	µg/L							
Fluorene	Total	ND	1	0.001	0.005	µg/L							
Indeno[1,2,3-cd]pyrene	Total	ND	1	0.001	0.005	µg/L							
Naphthalene	Total	ND	1	0.001	0.005	µg/L							
Perylene	Total	ND	1	0.001	0.005	µg/L							
Phenanthrene	Total	ND	1	0.001	0.005	µg/L							
Pyrene	Total	ND	1	0.001	0.005	µg/L							

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 96783-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
		Method: EPA 625.1				Batch ID: O-35146		Prepared: 02-May-22				Analyzed: 14-May-22	
(d10-Acenaphthene)	Total	96	1			% Recovery	100	0	96	65 - 113%	PASS		
(d10-Phenanthrene)	Total	97	1			% Recovery	100	0	97	80 - 111%	PASS		
(d12-Chrysene)	Total	97	1			% Recovery	100	0	97	60 - 139%	PASS		
(d12-Perylene)	Total	94	1			% Recovery	100	0	94	36 - 161%	PASS		
(d8-Naphthalene)	Total	89	1			% Recovery	100	0	89	44 - 119%	PASS		
1-Methylnaphthalene	Total	0.454	1	0.001	0.005	µg/L	0.5	0	91	49 - 117%	PASS		
1-Methylphenanthrene	Total	0.468	1	0.001	0.005	µg/L	0.5	0	94	66 - 127%	PASS		
2,3,5-Trimethylnaphthalene	Total	0.462	1	0.001	0.005	µg/L	0.5	0	92	57 - 120%	PASS		
2,6-Dimethylnaphthalene	Total	0.464	1	0.001	0.005	µg/L	0.5	0	93	54 - 117%	PASS		
2-Methylnaphthalene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	47 - 130%	PASS		
Acenaphthene	Total	1.39	1	0.001	0.005	µg/L	1.5	0	93	53 - 131%	PASS		
Acenaphthylene	Total	1.46	1	0.001	0.005	µg/L	1.5	0	97	43 - 140%	PASS		
Anthracene	Total	1.44	1	0.001	0.005	µg/L	1.5	0	96	58 - 135%	PASS		
Benz[a]anthracene	Total	1.43	1	0.001	0.005	µg/L	1.5	0	95	55 - 145%	PASS		
Benzo[a]pyrene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	51 - 143%	PASS		
Benzo[b]fluoranthene	Total	1.48	1	0.001	0.005	µg/L	1.5	0	99	46 - 165%	PASS		
Benzo[e]pyrene	Total	0.42	1	0.001	0.005	µg/L	0.5	0	84	42 - 152%	PASS		
Benzo[g,h,i]perylene	Total	1.52	1	0.001	0.005	µg/L	1.5	0	101	63 - 133%	PASS		
Benzo[k]fluoranthene	Total	1.43	1	0.001	0.005	µg/L	1.5	0	95	56 - 145%	PASS		
Biphenyl	Total	0.468	1	0.001	0.005	µg/L	0.5	0	94	56 - 119%	PASS		
Chrysene	Total	1.38	1	0.001	0.005	µg/L	1.5	0	92	56 - 141%	PASS		
Dibenz[a,h]anthracene	Total	1.58	1	0.001	0.005	µg/L	1.5	0	105	55 - 150%	PASS		
Dibenzo[a,l]pyrene	Total	38.8	1	0.001	0.005	µg/L	50	0	78	50 - 150%	PASS		

PHYSIS Project ID: 1407003-241
Client: Eurofins Eaton Analytical
Project: INTERA - Red-Hill-Incident

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	0.477	1	0.001	0.005	µg/L	0.5	0	95	75 - 113%	PASS			
Disalicylidenepropanediamine	Total	27	1	0.05	0.1	µg/L	50	0	54	50 - 150%	PASS			
Fluoranthene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	60 - 146%	PASS			
Fluorene	Total	1.48	1	0.001	0.005	µg/L	1.5	0	99	58 - 131%	PASS			
Indeno[1,2,3-cd]pyrene	Total	1.6	1	0.001	0.005	µg/L	1.5	0	107	50 - 151%	PASS			
Naphthalene	Total	1.31	1	0.001	0.005	µg/L	1.5	0	87	41 - 126%	PASS			
Perylene	Total	0.43	1	0.001	0.005	µg/L	0.5	0	86	48 - 141%	PASS			
Phenanthrene	Total	1.46	1	0.001	0.005	µg/L	1.5	0	97	67 - 127%	PASS			
Pyrene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	54 - 156%	PASS			

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 96783-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**		
		Method: EPA 625.1				Batch ID: O-35146		Prepared: 02-May-22				Analyzed: 14-May-22		
(d10-Acenaphthene)	Total	91	1			% Recovery	100	0	91	65 - 113%	PASS	5	30	PASS
(d10-Phenanthrene)	Total	93	1			% Recovery	100	0	93	80 - 111%	PASS	4	30	PASS
(d12-Chrysene)	Total	93	1			% Recovery	100	0	93	60 - 139%	PASS	4	30	PASS
(d12-Perylene)	Total	91	1			% Recovery	100	0	91	36 - 161%	PASS	3	30	PASS
(d8-Naphthalene)	Total	82	1			% Recovery	100	0	82	44 - 119%	PASS	8	30	PASS
1-Methylnaphthalene	Total	0.426	1	0.001	0.005	µg/L	0.5	0	85	49 - 117%	PASS	7	30	PASS
1-Methylphenanthrene	Total	0.461	1	0.001	0.005	µg/L	0.5	0	92	66 - 127%	PASS	2	30	PASS
2,3,5-Trimethylnaphthalene	Total	0.444	1	0.001	0.005	µg/L	0.5	0	89	57 - 120%	PASS	3	30	PASS
2,6-Dimethylnaphthalene	Total	0.438	1	0.001	0.005	µg/L	0.5	0	88	54 - 117%	PASS	6	30	PASS
2-Methylnaphthalene	Total	1.32	1	0.001	0.005	µg/L	1.5	0	88	47 - 130%	PASS	7	30	PASS
Acenaphthene	Total	1.32	1	0.001	0.005	µg/L	1.5	0	88	53 - 131%	PASS	6	30	PASS
Acenaphthylene	Total	1.4	1	0.001	0.005	µg/L	1.5	0	93	43 - 140%	PASS	4	30	PASS
Anthracene	Total	1.39	1	0.001	0.005	µg/L	1.5	0	93	58 - 135%	PASS	3	30	PASS
Benz[a]anthracene	Total	1.38	1	0.001	0.005	µg/L	1.5	0	92	55 - 145%	PASS	3	30	PASS
Benzo[a]pyrene	Total	1.41	1	0.001	0.005	µg/L	1.5	0	94	51 - 143%	PASS	0	30	PASS
Benzo[b]fluoranthene	Total	1.43	1	0.001	0.005	µg/L	1.5	0	95	46 - 165%	PASS	4	30	PASS
Benzo[e]pyrene	Total	0.42	1	0.001	0.005	µg/L	0.5	0	84	42 - 152%	PASS	0	30	PASS
Benzo[g,h,i]perylene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	63 - 133%	PASS	1	30	PASS
Benzo[k]fluoranthene	Total	1.39	1	0.001	0.005	µg/L	1.5	0	93	56 - 145%	PASS	2	30	PASS
Biphenyl	Total	0.44	1	0.001	0.005	µg/L	0.5	0	88	56 - 119%	PASS	7	30	PASS
Chrysene	Total	1.32	1	0.001	0.005	µg/L	1.5	0	88	56 - 141%	PASS	4	30	PASS
Dibenz[a,h]anthracene	Total	1.57	1	0.001	0.005	µg/L	1.5	0	105	55 - 150%	PASS	0	30	PASS
Dibenzo[a,l]pyrene	Total	39.1	1	0.001	0.005	µg/L	50	0	78	50 - 150%	PASS	1	30	PASS

PHYSIS Project ID: 1407003-241
Client: Eurofins Eaton Analytical
Project: INTERA - Red-Hill-Incident

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS		QA CODEc
Dibenzothiophene	Total	0.459	1	0.001	0.005	µg/L	0.5	0	92	75 - 113%	PASS	3	30	PASS	
Disalicylidenepropanediamine	Total	35.7	1	0.05	0.1	µg/L	50	0	71	50 - 150%	PASS	27	30	PASS	
Fluoranthene	Total	1.46	1	0.001	0.005	µg/L	1.5	0	97	60 - 146%	PASS	3	30	PASS	
Fluorene	Total	1.42	1	0.001	0.005	µg/L	1.5	0	95	58 - 131%	PASS	4	30	PASS	
Indeno[1,2,3-cd]pyrene	Total	1.59	1	0.001	0.005	µg/L	1.5	0	106	50 - 151%	PASS	1	30	PASS	
Naphthalene	Total	1.22	1	0.001	0.005	µg/L	1.5	0	81	41 - 126%	PASS	8	30	PASS	
Perylene	Total	0.425	1	0.001	0.005	µg/L	0.5	0	85	48 - 141%	PASS	1	30	PASS	
Phenanthrene	Total	1.4	1	0.001	0.005	µg/L	1.5	0	93	67 - 127%	PASS	4	30	PASS	
Pyrene	Total	1.47	1	0.001	0.005	µg/L	1.5	0	98	54 - 156%	PASS	2	30	PASS	

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 96784-MS1	**DH43-1 (380-1269-1)**					**Matrix: Samplewater**		**Sampled: 03-May-22 12:08**				**Received: 06-May-22**	
		Method: EPA 625.1				Batch ID: O-35146		Prepared: 07-May-22				Analyzed: 14-May-22	
(d10-Acenaphthene)	Total	83	1			% Recovery	100	0	83	45 - 118%	PASS		
(d10-Phenanthrene)	Total	90	1			% Recovery	100	0	90	56 - 123%	PASS		
(d12-Chrysene)	Total	85	1			% Recovery	100	0	85	36 - 142%	PASS		
(d12-Perylene)	Total	99	1			% Recovery	100	0	99	36 - 161%	PASS		
(d8-Naphthalene)	Total	72	1			% Recovery	100	0	72	20 - 112%	PASS		
1-Methylnaphthalene	Total	0.376	1	0.001	0.005	µg/L	0.5	0	75	39 - 104%	PASS		
1-Methylphenanthrene	Total	0.456	1	0.001	0.005	µg/L	0.5	0	91	62 - 136%	PASS		
2,3,5-Trimethylnaphthalene	Total	0.406	1	0.001	0.005	µg/L	0.5	0	81	47 - 132%	PASS		
2,6-Dimethylnaphthalene	Total	0.388	1	0.001	0.005	µg/L	0.5	0	78	37 - 118%	PASS		
2-Methylnaphthalene	Total	0.374	1	0.001	0.005	µg/L	0.5	0	75	33 - 113%	PASS		
Acenaphthene	Total	0.402	1	0.001	0.005	µg/L	0.5	0	80	51 - 116%	PASS		
Acenaphthylene	Total	0.412	1	0.001	0.005	µg/L	0.5	0	82	53 - 127%	PASS		
Anthracene	Total	0.418	1	0.001	0.005	µg/L	0.5	0	84	60 - 126%	PASS		
Benz[a]anthracene	Total	0.395	1	0.001	0.005	µg/L	0.5	0	79	51 - 165%	PASS		
Benzo[a]pyrene	Total	0.384	1	0.001	0.005	µg/L	0.5	0	77	24 - 170%	PASS		
Benzo[b]fluoranthene	Total	0.383	1	0.001	0.005	µg/L	0.5	0	77	38 - 158%	PASS		
Benzo[e]pyrene	Total	0.512	1	0.001	0.005	µg/L	0.5	0.0103	100	26 - 157%	PASS		
Benzo[g,h,i]perylene	Total	0.533	1	0.001	0.005	µg/L	0.5	0.00971	105	57 - 133%	PASS		
Benzo[k]fluoranthene	Total	0.38	1	0.001	0.005	µg/L	0.5	0	76	27 - 167%	PASS		
Biphenyl	Total	0.389	1	0.001	0.005	µg/L	0.5	0	78	41 - 111%	PASS		
Chrysene	Total	0.376	1	0.001	0.005	µg/L	0.5	0	75	58 - 136%	PASS		
Dibenz[a,h]anthracene	Total	0.458	1	0.001	0.005	µg/L	0.5	0	92	53 - 156%	PASS		
Dibenzo[a,l]pyrene	Total	33.1	1	0.001	0.005	µg/L	50	0	66	50 - 150%	PASS		

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Dibenzothiophene	Total	0.429	1	0.001	0.005	µg/L	0.5	0	86	69 - 112%	PASS			
Disalicylidenepropanediamine	Total	40.9	1	0.05	0.1	µg/L	50	0	82	50 - 150%	PASS			
Fluoranthene	Total	0.455	1	0.001	0.005	µg/L	0.5	0.00589	90	61 - 147%	PASS			
Fluorene	Total	0.42	1	0.001	0.005	µg/L	0.5	0	84	62 - 120%	PASS			
Indeno[1,2,3-cd]pyrene	Total	0.56	1	0.001	0.005	µg/L	0.5	0	112	58 - 147%	PASS			
Naphthalene	Total	0.355	1	0.001	0.005	µg/L	0.5	0	71	22 - 110%	PASS			
Perylene	Total	0.388	1	0.001	0.005	µg/L	0.5	0	78	34 - 147%	PASS			
Phenanthrene	Total	0.438	1	0.001	0.005	µg/L	0.5	0.00746	86	64 - 121%	PASS			
Pyrene	Total	0.469	1	0.001	0.005	µg/L	0.5	0.00787	92	65 - 146%	PASS			

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 96784-MS2	**DH43-1 (380-1269-1)**					**Matrix: Samplewater**		**Sampled: 03-May-22 12:08**				**Received: 06-May-22**		
		Method: EPA 625.1				Batch ID: O-35146		Prepared: 07-May-22				Analyzed: 14-May-22		
(d10-Acenaphthene)	Total	85	1			% Recovery	100	0	85	45 - 118%	PASS	2	30	PASS
(d10-Phenanthrene)	Total	94	1			% Recovery	100	0	94	56 - 123%	PASS	4	30	PASS
(d12-Chrysene)	Total	88	1			% Recovery	100	0	88	36 - 142%	PASS	3	30	PASS
(d12-Perylene)	Total	104	1			% Recovery	100	0	104	36 - 161%	PASS	5	30	PASS
(d8-Naphthalene)	Total	73	1			% Recovery	100	0	73	20 - 112%	PASS	1	30	PASS
1-Methylnaphthalene	Total	0.436	1	0.001	0.005	µg/L	0.568	0	77	39 - 104%	PASS	3	30	PASS
1-Methylphenanthrene	Total	0.566	1	0.001	0.005	µg/L	0.568	0	100	62 - 136%	PASS	8	30	PASS
2,3,5-Trimethylnaphthalene	Total	0.493	1	0.001	0.005	µg/L	0.568	0	87	47 - 132%	PASS	7	30	PASS
2,6-Dimethylnaphthalene	Total	0.461	1	0.001	0.005	µg/L	0.568	0	81	37 - 118%	PASS	4	30	PASS
2-Methylnaphthalene	Total	0.435	1	0.001	0.005	µg/L	0.568	0	77	33 - 113%	PASS	3	30	PASS
Acenaphthene	Total	0.473	1	0.001	0.005	µg/L	0.568	0	83	51 - 116%	PASS	4	30	PASS
Acenaphthylene	Total	0.488	1	0.001	0.005	µg/L	0.568	0	86	53 - 127%	PASS	5	30	PASS
Anthracene	Total	0.515	1	0.001	0.005	µg/L	0.568	0	91	60 - 126%	PASS	8	30	PASS
Benz[a]anthracene	Total	0.531	1	0.001	0.005	µg/L	0.568	0	93	51 - 165%	PASS	16	30	PASS
Benzo[a]pyrene	Total	0.502	1	0.001	0.005	µg/L	0.568	0	88	24 - 170%	PASS	13	30	PASS
Benzo[b]fluoranthene	Total	0.558	1	0.001	0.005	µg/L	0.568	0	98	38 - 158%	PASS	24	30	PASS
Benzo[e]pyrene	Total	0.687	1	0.001	0.005	µg/L	0.568	0.0103	119	26 - 157%	PASS	17	30	PASS
Benzo[g,h,i]perylene	Total	0.698	1	0.001	0.005	µg/L	0.568	0.00971	121	57 - 133%	PASS	14	30	PASS
Benzo[k]fluoranthene	Total	0.51	1	0.001	0.005	µg/L	0.568	0	90	27 - 167%	PASS	17	30	PASS
Biphenyl	Total	0.452	1	0.001	0.005	µg/L	0.568	0	80	41 - 111%	PASS	3	30	PASS
Chrysene	Total	0.513	1	0.001	0.005	µg/L	0.568	0	90	58 - 136%	PASS	20	30	PASS
Dibenz[a,h]anthracene	Total	0.644	1	0.001	0.005	µg/L	0.568	0	113	53 - 156%	PASS	20	30	PASS
Dibenzo[a,l]pyrene	Total	29.6	1	0.001	0.005	µg/L	56.8	0	52	50 - 150%	PASS	24	30	PASS

PHYSIS Project ID: 1407003-241
Client: Eurofins Eaton Analytical
Project: INTERA - Red-Hill-Incident

Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS		QA CODEc
Dibenzothiophene	Total	0.52	1	0.001	0.005	µg/L	0.568	0	92	69 - 112%	PASS	7	30	PASS	
Disalicylidenepropanediamine	Total	42.4	1	0.05	0.1	µg/L	56.8	0	75	50 - 150%	PASS	9	30	PASS	
Fluoranthene	Total	0.57	1	0.001	0.005	µg/L	0.568	0.00589	99	61 - 147%	PASS	10	30	PASS	
Fluorene	Total	0.5	1	0.001	0.005	µg/L	0.568	0	88	62 - 120%	PASS	5	30	PASS	
Indeno[1,2,3-cd]pyrene	Total	0.714	1	0.001	0.005	µg/L	0.568	0	126	58 - 147%	PASS	12	30	PASS	
Naphthalene	Total	0.409	1	0.001	0.005	µg/L	0.568	0	72	22 - 110%	PASS	1	30	PASS	
Perylene	Total	0.496	1	0.001	0.005	µg/L	0.568	0	87	34 - 147%	PASS	11	30	PASS	
Phenanthrene	Total	0.536	1	0.001	0.005	µg/L	0.568	0.00746	93	64 - 121%	PASS	8	30	PASS	
Pyrene	Total	0.589	1	0.001	0.005	µg/L	0.568	0.00787	102	65 - 146%	PASS	10	30	PASS	

CHAIN OF CUSTODY

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone: 626-386-1100

Chain of Custody Record

eurofins | Environment Testing America

6/26/2022

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Frank, Debbie L	Carrier Tracking No(s):	COC No: 380-573.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Debbie.Frank@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Physis Environmental Laboratories		Accreditations Required (See note): State - Hawaii		Job #: 380-1269-1
Address: 1904 Wright Circle, ,	Due Date Requested: 5/12/2022			
City: Anaheim	TAT Requested (days):			
State, Zip: CA, 92806				
Phone:	PO #:			
Email:	WO #:			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu Compliance	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

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)	SUB (625 - PAH Only)/ 625 - PAH Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DH43-1 (380-1269-1)	5/3/22	12:08 Hawaiian		Water			X	1	PAH Only
DH43-1 (380-1269-1MS)	5/3/22	12:08 Hawaiian	MS	Water			X	1	PAH Only
DH43-1 (380-1269-1MSD)	5/3/22	12:08 Hawaiian	MSD	Water			X	1	PAH Only
DH43-2 (380-1269-2)	5/3/22	13:45 Hawaiian		Water			X	1	PAH Only
DH43-3 (380-1269-3)	5/3/22	15:00 Hawaiian		Water			X	1	PAH Only
DH43-4 (380-1269-4)	5/3/22	16:15 Hawaiian		Water			X	1	PAH Only
DH43-5 (380-1269-5)	5/3/22	16:50 Hawaiian		Water			X	1	PAH Only

Note: Since laboratory accreditations are subject to change, Eurofins Eaton Analytical, LLC places the ownership of method, analyte & accreditation compliance upon out 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 complicance to Eurofins Eaton Analytical, LLC.

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	5/6/22 1258	EEA	[signature] Physis	5/6/22 12:59	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

ICOC No:
380-573

Containers

Count	Container Type	Preservative
7	Amber Glass 1 liter - unpreserved	None

Shipping Order Form

eurofins | Environment Testing America

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone (626) 386-1100

6/26/2022

Shipping Order ID: 3666 | **Ship Via: FedEx** | **Due On: 5/6/2022 11:59:00PM**

Ship To Information

Project Manager:

Company Name: Physis Environmental Laboratories
Attention: Shipping/Receiving
Address 1: 1904 Wright Circle
Address 2:
Address 3:
City: Anaheim
State: CA
Zip: 92806
Phone #:
Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

- ☑ Ready to Fill
- ☐ Preprinted COC
  - ☐ Number of COC Copies
- ☐ Seals on Bottle
- ☐ Seals on Coolers
- ☐ Priority
- ☐ Return Shipment Labels
  - ☐ Prepaid Return Monrovia, CA (Suite 100)
- ☐ Short Hold Times
- ☑ Temperature Control
- ☐ Rush

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

Bottle Order Information

Bottle Order:
Bottle Order #:
Request From Client: 5/6/2022
Date Order Posted:
Order Status: Ready To Process
Prepared By:
Deliver By Date: ***5/6/2022 11:59:00PM***
Lab Project Number:
PWSID:

Order Completion Information

Creator: Joseph Sanchez
Filled by:
Sent Date:
Sent Via:
Tracking #:

6/26/2022

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #

Notes to Field Staff:

Scan QR code for field sampler instructions

Health and Safety Notes:

Preservative	Comment

Page 142 of 159

Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:
Relinquished By	Company	Date	Time	Received By	Company	Seal #:
						Seal #:
						Seal #:

Please notify your PM immediately if an error is found in shipment. When returning samples, please return all provided QC samples.

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

Project Iteration ID: 1407003-241
Client Name: Eurofins Eaton Analytical
Project Name: INTERA - Red-Hill-Incident
COC Page Number: 6 of 6
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: AG
2. Date Received: 5/6/22
3. Time Received: 12:54
4. Client Name: Eurofins
5. Courier Information: (Please circle)
   - (Client) • UPS • Area Fast • DRS
   - FedEx • GSO/GLS • Ontrac • PAMS
   - PHYSIS Driver:
     - i. Start Time:_____ iii. Total Mileage: _____
     - ii. End Time:_____ iv. Number of Pickups:_____
6. Container Information: (Please put the # of containers or circle none)
   - 1 Cooler • ___ Styrofoam Cooler • ___ Boxes • None
   - ___ Carboy(s) • ___ Carboy Trash Can(s) • ___ Carboy Cap(s) • Other _____
7. What type of ice was used: (Please circle any that apply)
   - (Wet Ice) • Blue Ice • Dry Ice • Water • None
8. Randomly Selected Samples Temperature (°C): 4.7 Used I/R Thermometer # 1

Inspection Info

1. Initials Inspected By: RGH

Sample Integrity Upon Receipt:

1. COC(s) included and completely filled out..... (Yes) / No
2. All sample containers arrived intact..... (Yes) / No
3. All samples listed on COC(s) are present..... (Yes) / No
4. Information on containers consistent with information on COC(s)..... (Yes) / No
5. Correct containers and volume for all analyses indicated..... Yes / (No)
6. All samples received within method holding time..... (Yes) / No
7. Correct preservation used for all analyses indicated..... (Yes) / No
8. Name of sampler included on COC(s)..... Yes / (No)

Notes:

Low volume

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

Website: www.EatonAnalytical.com

CHAIN OF CUSTODY RECORD

1269

Loc: 380
1269

6/26/2022

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED AGAINST COC BY: CB

SAMPLES LOGGED IN BY: _____

SAMPLE TEMP RECEIVED AT: SAMPLES REC'D DAY OF COLLECTION? ☐ (check for yes)

☐ _____ (Other) IR Gun ID = _____ (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

☒ Monrovia IR Gun ID = 401 (Observation= 3.8 °C) (Corr.Factor -0.2 °C) (Final = 3.6 °C)

Compliance Acceptance Criteria: (Chemistry: 4 ± 2 °C) (Microbiology: < 10°C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: HONOLULU BOARD OF WATER SUPPLY

PROJECT CODE: RED HILL

EEA CLIENT CODE: HONOLULU

COC ID:

SAMPLE GROUP: DH43 MAY 2022 SAMPLING

TAT requested: rush by adv notice only STD ___ 1 wk ___ 3 day X 2 day ___ 1 day ___

COMPLIANCE SAMPLES ☐ (check for yes) NON-COMPLIANCE SAMPLES ☒ (check for yes)

- Requires state forms ☐ REGULATION INVOLVED: _____

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, NPDES, etc.)

SEE ATTACHED KIT ORDER FOR ANALYSES ☒ (check for yes), OR

List ALL ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX *	FIELD DATA	FIELD DATA	$8015 GAS	$260	625/8015MD 8015 LISTED											SAMPLER COMMENTS
5/3/22	1208	DH43-1		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1215	DH43-1 MS		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1225	DH43-1 MD		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1345	DH43-2		RGW			3	3	4											
5/3/22	1500	DH43-3		RGW			3	3	4											
5/3/22	1615	DH43-4		RGW			3	3	4											
5/3/22	1650	DH43-5		RGW			3	3	4											
		TRIP BANK		O			2	2	0											
							40ml VOAs		1 LITER AMBER											

380-1269 Chain of Custody

* MATRIX TYPES: RSW = Raw Surface Water; RGW = Raw Ground Water; CFW = Chlor(am)inated Finished Water; FW = Other Finished Water; SEAW = Sea Water; WW = Waste Water; BW = Bottled Water; SW = Storm Water; SO = Soil; SL = Sludge; O = Other - Please Identify

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:		JIM JOSEPH - INTERA	INTERA / PRIN ENGINEER	5/3/22	
RELINQUISHED BY:		JIM JOSEPH	INTERA / PRIN. ENGINEER	5/4/22	~1145
RECEIVED BY:			EHD	5.5.22	1130
RELINQUISHED BY:					
RECEIVED BY:					

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Kit Order for BOARD OF WATER SUPPLY, CITY AND COUNTY OF

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

Created Date & Time: 4/27/2022 2:50:36PM

Note: Sampler Please return this paper with your samples

Kit #: 318547

Created By: Linda Geddes - [LXG]
Deliver By: 05/02/2022
STG: Bottle Orders
Ice Type: W

Client ID: HONOLULU
Project Code: INTERA Bottle Orders
Group Name: DH43 Testing
PO#/JOB#: C20525101 exp 05312023
Description: No Schedule

Loc: 380
1269

Ship Sample Kits to
INTERA Incorporated
41-038 A Manana Street
Waimanalo, HI 96795

Attn: Kevin Gooding- Ship INTERA
Phone: 808.382.6853

Send Report to
Honolulu Board of Water Supply
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

Billing Address
Honolulu Board of Water Supply
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

# of Sample	Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
7	@625PAH_Physis, TPH 8015 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8	4 - 1L amber glass [no preservative]	28	
7	8015 Gas	3 - 40ml amber glass vial [1:1 HCL]	21	
7	@8260EDD	3 - 40ml amber glass vial [4 drops 6NHCL (36%)]	21	
1	8015 Gas Travel Blank	2 - 40ml amber glass vial [4 drops of 1:1 HCL + H2O]	2	UN1789
1	@8260EDD TB	3 - 40ml amber glass vial [4drops of 1:1 HCL + H2O]	3	UN1789

Sum Tests: 23 **Sum Bottles:** 75

Comments

380-1269 Login
PM: Frank, Debbie L
Company: City & County of Honolulu

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 3.8 °C) (Corr.Factor -0.2 °C) (Final = 3.6 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen ✓ Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ________

Compliance Acceptance Criteria: 272779888236

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	Chris Brown	Eurofins Eaton Analytical	5-5-22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 4.0 °C) (Corr.Factor -0.2 °C) (Final = 3.8 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ________

2727 7988 8225

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	[handwritten name]	Eurofins Eaton Analytical	5.5.22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 4.6 °C) (Corr.Factor -0.2 °C) (Final = 4.4 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ________

272779888203

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	Chu Brock	Eurofins Eaton Analytical	5.5.22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF COSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 5.0 °C) (Corr.Factor -0.2 °C) (Final = 4.8 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ____

272779888214

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ____ Lot Number: ____ pH strip type: 0 - 14 or ____ Expiration Date ____ Results: ____

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ____ Expiration Date: ____ Results ____

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ____

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[illegible]	[illegible]	Eurofins Eaton Analytical	5-5-22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-F0M5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

CHAIN OF CUSTODY RECORD

1269

Loc: 380
1269

750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

Website: www.EatonAnalytical.com

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____ SAMPLES CHECKED AGAINST COC BY: CB

SAMPLES LOGGED IN BY: _____

SAMPLE TEMP RECEIVED AT: SAMPLES REC'D DAY OF COLLECTION? ☐ (check for yes)

☐ _____ (Other) IR Gun ID = _____ (Observation= _____ °C) (Corr.Factor _____ °C) (Final = _____ °C)

☒ Monrovia IR Gun ID = 401 (Observation= 3.8 °C) (Corr.Factor -0.2 °C) (Final = 3.6 °C)

Compliance Acceptance Criteria: (Chemistry: 4 ± 2 °C) (Microbiology: < 10°C)

TYPE OF ICE: Real X Synthetic _____ No Ice _____ CONDITION OF ICE: Frozen X Partially Frozen _____ Thawed _____ N/A _____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: _____

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: HONOLULU BOARD OF WATER SUPPLY

PROJECT CODE: RED HILL

EEA CLIENT CODE: HONOLULU

COC ID:

SAMPLE GROUP: DH43 MAY 2022 SAMPLING

TAT requested: rush by adv notice only STD ___ 1 wk ___ 3 day X 2 day ___ 1 day ___

(check for yes) (check for yes)

COMPLIANCE SAMPLES ☐ NON-COMPLIANCE SAMPLES ☒

- Requires state forms ☐ REGULATION INVOLVED: _____

Type of samples (circle one): ROUTINE SPECIAL CONFIRMATION (eg. SDWA, NPDES, etc.)

SEE ATTACHED KIT ORDER FOR ANALYSES ☒ (check for yes), OR

List ALL ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX *	FIELD DATA	FIELD DATA	$015 GAS	$260	625/8015MD 8015 LISTED											SAMPLER COMMENTS
5/3/22	1208	DH43-1		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1215	DH43-1 MS		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1225	DH43-1 MD		RGW			3	3	3											ONLY 3 OF 4 LITERS
5/3/22	1345	DH43-2		RGW			3	3	4											
5/3/22	1500	DH43-3		RGW			3	3	4											
5/3/22	1615	DH43-4		RGW			3	3	4											
5/3/22	1650	DH43-5		RGW			3	3	4											
		TRIP BANK		O			2	2	0											
							40ml VOAs		1 LITER AMBER											

380-1269 Chain of Custody

* MATRIX TYPES: RSW = Raw Surface Water; RGW = Raw Ground Water; CFW = Chlor(am)inated Finished Water; FW = Other Finished Water; SEAW = Sea Water; WW = Waste Water; BW = Bottled Water; SW = Storm Water; SO = Soil; SL = Sludge; O = Other - Please Identify

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:		JIM JOSEPH - INTERA	INTERA / PRIN ENGINEER	5/3/22	
RELINQUISHED BY:		JIM JOSEPH	INTERA / PRIN. ENGINEER	5/4/22	~1145
RECEIVED BY:			EDD	5.5.22	1130
RELINQUISHED BY:					
RECEIVED BY:					

eurofins | Eaton Analytical

750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
(626) 386-1100 FAX (866) 988-3757

Kit Order for BOARD OF WATER SUPPLY, CITY AND COUNTY OF

Debbie L Frank is your Eurofins Eaton Analytical, LLC Service Manager

Created Date & Time: 4/27/2022 2:50:36PM

Note: Sampler Please return this paper with your samples

Kit #: 318547

Created By: Linda Geddes - [LXG]
Deliver By: 05/02/2022
STG: Bottle Orders
Ice Type: W

Client ID: HONOLULU
Project Code: INTERA Bottle Orders
Group Name: DH43 Testing
PO#/JOB#: C20525101 exp 05312023
Description: No Schedule

Loc: 380
1269

Ship Sample Kits to	Send Report to	Billing Address
INTERA Incorporated 41-038 A Manana Street Waimanalo, HI 96795 Attn: Kevin Gooding- Ship INTERA Phone: 808.382.6853	Honolulu Board of Water Supply 630 South Beretania Street Public Service Bldg." Room 308 Honolulu, HI 96843 Attn: Erwin Kawata Phone: 808-748-5091 Fax: 808-550-5018	Honolulu Board of Water Supply 630 South Beretania Street Public Service Bldg." Room 308 Honolulu, HI 96843 Attn: Erwin Kawata Phone: 808-748-5091 Fax: 808-550-5018

# of Sample	Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
7	@625PAH_Physis, TPH 8015 Diesel and Motor Oil, TPH 8015 Jet Fuel 5, TPH 8015 Jet Fuel 8	4 - 1L amber glass [no preservative]	28	
7	8015 Gas	3 - 40ml amber glass vial [1:1 HCL]	21	
7	@8260EDD	3 - 40ml amber glass vial [4 drops 6NHCL (36%)]	21	
1	8015 Gas Travel Blank	2 - 40ml amber glass vial [4 drops of 1:1 HCL + H2O]	2	UN1789
1	@8260EDD TB	3 - 40ml amber glass vial [4drops of 1:1 HCL + H2O]	3	UN1789

Sum Tests: 23 **Sum Bottles:** 75

Comments

380-1269 Login
PM: Frank, Debbie L
Company: City & County of Honolulu

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:
Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 3.8 °C) (Corr.Factor 0.2 °C) (Final = 3.6 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen ✓ Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ____________

Compliance Acceptance Criteria: 272779888236

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ____________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ____________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ____________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	Chris Brown	Eurofins Eaton Analytical	5.5.22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 4.0 °C) (Corr.Factor -0.2 °C) (Final = 3.8 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ________

Compliance Acceptance Criteria: 272779888225

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	[signature]	Eurofins Eaton Analytical	5.5.22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:
Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 4.6 °C) (Corr.Factor -0.2 °C) (Final = 4.4 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen K Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / (FedEx) / UPS / DHL / Area Fast / Top Line / Other: ________
272779888203

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	Chn Broch	Chn Broch	Eurofins Eaton Analytical	5.5.22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

Page ___ of ___

eurofins | Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 5.0 °C) (Corr.Factor -0.2 °C) (Final = 4.8 °C)

TYPE OF ICE: Real X Synthetic ____ No Ice ____ CONDITION OF ICE: Frozen X Partially Frozen ____ Thawed ____ N/A ____

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: ________

2727 7988 8214

Compliance Acceptance Criteria:

1) Chemistry: >0, ≤6°C, not frozen (NELAP) (If received after 24 hrs of sample collection)

2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)

3) Microbiology, Surface Water: < 10°C (If received after 2 hours of sample collection)

If out of temperature range for both Chemistry and Microbiology samples and temperature does not confirm, then measure the temperature of each quadrant and record each temperature of the quadrants

1 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	2 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)
3 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)	4 = (Observation= ____ °C) (Corr.Factor ____ °C) (Final = ____ °C)

4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (If received after 24 hrs of sample collection)

5) pH Check. Manufacturer: ________ Lot Number: ________ pH strip type: 0 - 14 or ________ Expiration Date ________ Results: ________

6) Chlorine check. Manufacturer: Sansafe. Lot No.: ________ Expiration Date: ________ Results ________

7) VOA and Radon Headspace: No Samples with Headspace: ☐ Samples with Headspace (see below): ☐

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)

Exempt from headspace concerns: Methods 515.4, HAA(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test	Samp ID	Bottle #	None/<6 mm	>6mm	Test

Note Sample IDs which have dissimilar headspace (i.e. potential sampling errors): ________

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	Chr Bock	Chr Bocer	Eurofins Eaton Analytical	5-5-22	1130
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

OA FO-F0M5504 (9.28.21) Ver 9

Page ___ of ___

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Frank, Debbie L	Carrier Tracking No(s):	COC No: 380-576 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Debbie Frank@et eurofinsus com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-1269-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 5/25/2022			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(T el)	PO #:			
Email:	WO #:			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu Compliance	SSOW#:			

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
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	Z	other (specify)

Other:

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)	8260B/5030C (MOD) Super Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DH43-1 (380-1269-1)	5/3/22	12 08 Hawaiian		Water			X	3	
DH43 1 (380-1269-1M S)	5/3/22	12·08 Hawaiian	MS	Water			X	3	
DH43-1 (380-1269-1M SD)	5/3/22	12 08 Hawaiian	MSD	Water			X	3	
DH43-2 (380-1269-2)	5/3/22	13 45 Hawaiian		Water			X	3	
DH43-3 (380-1269-3)	5/3/22	15 00 Hawaiian		Water			X	3	
DH43-4 (380-1269-4)	5/3/22	16 15 Hawaiian		Water			X	3	
DH43-5 (380-1269-5)	5/3/22	16.50 Hawaiian		Water			X	3	
TRAVEL BLANK (380-1269-6)	5/3/22	Hawaiian		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Eaton Analytical LLC places the ownership of method, analyte & accreditation compliance upon out 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 complicance to Eurofins Eaton Analytical, LLC.

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
G.REITNER	05/06/22	EEA		5-6-22 11:30	
	5-6-22			5/6/22 12:55	
	AM				

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		2·0 / 3·7 IR96

Page 156 of 159

6/26/2022

Monrovia, CA (Suite 100)
750 Royal Oaks Drive Suite 100
Monrovia, CA 91016
Phone 626-386-1100

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Frank, Debbie L	Carrier Tracking No(s)	COC No: 380-576 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Debbie Frank@et eurofinsus com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Southwest,		Accreditations Required (See note): State - Hawaii		Job #: 380-1269-1
Address: 2841 Dow Avenue, Suite 100, ,	Due Date Requested: 5/25/2022			
City: Tustin	TAT Requested (days):			
State, Zip: CA, 92780				
Phone: 714-895-5494(T el)	PO #:			
Email	WO #:			
Project Name: INTERA - Red-Hill-Incident	Project #: 38000861			
Site: Honolulu Compliance	SSOW#:			

Analysis Requested

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
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	Z	other (specify)

Other:

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)	8260B/5030C (MOD) Super Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
DH43-1 (380-1269-1)	5/3/22	12 08 Hawaiian		Water			X	3	
DH43 1 (380-1269-1M S)	5/3/22	12·08 Hawaiian	MS	Water			X	3	
DH43-1 (380-1269-1M SD)	5/3/22	12 08 Hawaiian	MSD	Water			X	3	
DH43-2 (380-1269-2)	5/3/22	13 45 Hawaiian		Water			X	3	
DH43-3 (380-1269-3)	5/3/22	15 00 Hawaiian		Water			X	3	
DH43-4 (380-1269-4)	5/3/22	16 15 Hawaiian		Water			X	3	
DH43-5 (380-1269-5)	5/3/22	16.50 Hawaiian		Water			X	3	
TRAVEL BLANK (380-1269-6)	5/3/22	Hawaiian		Water			X	2	

Note Since laboratory accreditations are subject to change, Eurofins Eaton Analytical LLC places the ownership of method, analyte & accreditation compliance upon out 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 complicance to Eurofins Eaton Analytical, LLC.

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

Empty Kit Relinquished by	Date	Time	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
G.REITNER	05/06/22 12:55	EEA		5-6-22 11:30	
	5-6-22 12:55			5/6/22 12:55	EE
	A/M				

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks
		2·0 / 3·7 IR96

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-1269-1

Login Number: 1269
List Number: 1
Creator: Robb, Kathleen

List Source: Eurofins Eaton Monrovia

Question	Answer	Comment
The cooler's 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 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	
Samples do not require splitting or compositing.	True	
Container provided by EEA	True	

Login Sample Receipt Checklist

Client: City & County of Honolulu

Job Number: 380-1269-1

Login Number: 1269
List Number: 2
Creator: Ortiz-Luis, Michael

List Source: Eurofins Calscience
List Creation: 05/06/22 05:57 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7
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?	False	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	