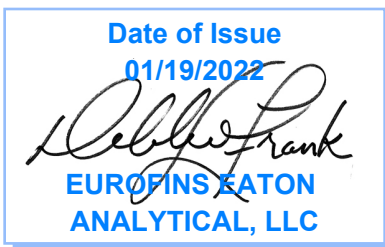


750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: (626) 386-1100  
Fax: (866) 988-3757  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg.” Room 308  
Honolulu, HI 96843  
Attention: Erwin Kawata  
Fax: 808-550-5018



Utah ELCP CA00006

DEB: Debbie L Frank  
Project Manager

Report: 976378  
Project: RED-HILL  
Group: Red-Hill Expanded List (Albuquerque+)

\* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.

\* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.

\* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.

\* Test results relate only to the sample(s) tested.

\* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).

\* This report shall not be reproduced except in full, without the written approval of the laboratory.

\* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

## STATE CERTIFICATION LIST

State	Certification Number	State	Certification Number
Alabama	41060	Montana	Cert 0035
Arizona	AZ0778	Nebraska	NE-OS-21-13
Arkansas	CA00006	Nevada	CA00006
California	2813	New Hampshire *	2959
Colorado	CA00006	New Jersey *	CA 008
Connecticut	PH-0107	New Mexico	CA00006
Delaware	CA 006	New York *	11320
Florida *	E871024	North Carolina	06701
Georgia	947	North Dakota	R-009
Guam	21-008R	Ohio - 537.1	87786
Hawaii	CA00006	Oregon *	4034
Idaho	CA00006	Pennsylvania *	68-00565
Illinois	200033	Puerto Rico	CA00006
Indiana	C-CA-01	Rhode Island	LAO00326
Iowa – Asbestos	413	South Carolina	87016
Kansas *	E-10268	South Dakota	CA11320
Kentucky	90107	Tennessee	TN02839
Louisiana *	LA008	Texas *	T104704230-20-18
Maine	CA00006	Utah (Primary AB) *	CA00006
Maryland	224	Vermont	VT0114
Marianas Islands	MP0004	Virginia *	460260
Massachusetts	M-CA006	Washington	C838
Michigan	9906	EPA Region 5	CA00006
Mississippi	CA00006	Los Angeles County Sanitation Districts	10264

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

The test listed below are accredited and met the requirements of ISO/IEC 17025 as verify by A2LA.

Refer to our certificates and scope of accreditations (no. 5890-1 and 5890-2) found at:

<https://www.eurofinsus.com/Eaton>

Test(s)	Method(s)	Potable Water *	Waste Water	Test(s)	Method(s)	Potable Water *	Waste Water
Enterococci	Enterolert	x	x	Gross Alpha coprecipitation	SM 7110 C	x	x
<i>Escherichia coli</i> (Enumeration)	SM 9221 B.1 SM 9221 F	x		Hardness	SM 2340 B	x	x
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x	Hexavalent Chromium	EPA 218.6,	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x	Hexavalent Chromium	EPA 218.7,	x	
Heterotrophic Bacteria	SM 9215 B	x		Hexavalent Chromium	SM 3500-Cr B		x
Legionella	Legiolert®	x		Inorganic Anions and DBPs	EPA 300.0	x	x
<i>Pseudomonas aeruginosa</i>	Idexx Pseudalart	x		Norganic Anions and DBPs	EPA 300.1	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x	Kjeldahl Nitrogen	EPA 351.2		x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x	Metals	EPA 200.7, EPA200.8	x	x
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x		Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Total Microcystins and Nodularins	EPA 546	X		Nitrate/Nitrite Nitrogen	EPA 353.2	x	x
Yeast and Mold	SM 9610	x		Odor	SM2150B	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x		Organohalide Pesticides and PCB	EPA 505	x	
1,4-Dioxane	EPA 522	x		Ortho Phosphate	SM 4500P E	x	
2,3,7,8-TCDD	Modified EPA 1613 B	x		Oxyhalides Disinfection Byproducts	EPA 317.0	x	
Acrylamide	+ LCMS 2440)	x		Perchlorate	EPA 331.0	x	
Algal Toxins/Microcystin	+ LCMS 3570	x		Perchlorate (Low and High Levels)	EPA 314.0	x	
Alkalinity	SM 2320B	x	x	Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	x	
Ammonia	EPA 350.1, SM 4500-NH3 H		x	PPCP and EDC	+ LCMS-2443	x	
Asbestos	EPA 100.2	x	x	pH	EPA 150.1 SM 4500-H+ B	x	x
Bicarbonate Alkalinity as HCO3	SM 2330 B	x	x	Phenolics – Low Level	+WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
BOD/CBOD	SM 5210 B		x	Phenylurea Pesticides/Herbicides	+ LCMS-2448	x	
Bromate	+ LCMS- 2447	x		Radium-226, Radium-228	GA Tech (Rad-2374)	x	
Carbonate as CO3	SM 2330 B	x	x	Radon-222	SM 7500RN	x	
Carbonyls	EPA 556	x	x	Residue (Filterable)	SM 2540C	x	x
Chemical Oxygen Demand	EPA 410.4, SM 5220D		x	Residue (Non-Filterable)	SM 2540D		x
Chlorinated Acids	EPA 515.4	x		Residue (Total)	SM 2540B		x
Chlorine Dioxide	Palin Test Chlordio X Plus, SM 4500-CLO2 D	x		Residue (Volatile)	EPA 160.4		x
Chlorine, Free, Combined, Total Residual, Chloramines	SM 4500-Cl G	x		Semi-Volatile Compounds	EPA 525.2	x	
Color	SM2120B	x		Silica	SM 4500-SiO2 C	x	x
Conductivity	EPA 120.1, SM 2510B	x	x	Sulfide	SM 4500-S D		x
Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated	SM 2330 B	x		Sulfite	SM 4500-SO3 B	x	x
Cyanide (Amenable)	SM 4500-CN G	x	x	Surfactants	SM 5540C	x	x
Cyanide (Free)	SM 4500CN F	x	x	Taste and Odor	SM 6040 E	x	
Cyanide (Total)	EPA 335.4	x	x	Total Organic Carbon	SM 5310 C	x	x
Cyanogen Chloride (Screen)	+ 335 Mod (WC-24467)	x		Total Phenols	EPA 420.1		x
Diquat and Paraquat	EPA 549.2	x		Total Phenols	EPA 420.4	x	x
DBP and HAA	SM 6251 B	x		Triazine Pesticides and their Degradates	+ LCMS-3617	x	
Dissolved Organic Carbon	SM 5310 C	x		Turbidity	EPA 180.1	x	x
Dissolved Oxygen	SM 4500-O G		x	Uranium by ICP/MS	EPA 200.8	x	
EDB/DCBP/TCP	EPA 504.1	x		UV 254 Organic Constituents	SM 5910B	x	
EDB/DBCP and Disinfection Byproducts	EPA 551.1	x		VOCs	EPA 524.2	x	
EDTA and NTA	+ WC-2454	x		VOCs	+ (GCMS 2412) by EPA 524.2 modified	x	
Endothall	EPA 548.1, +(LCMS-2445)	x					
Fluoride	SM 4500F C	x	x				
Glyphosate	EPA 547	x					
Glyphosate and AMPA	+ LCMS-3618	x					
Gross Alpha and Gross Beta	EPA 900.0	x	x				

(\* ) includes: Bottled Water, Drinking Water and Water as Component of Food & Beverage.

(+ ) In-House Method

### Acknowledgement of Samples Received

Addr: **Honolulu Board of Water Supply**  
 630 South Beretania Street  
 Public Service Bldg." Room 308  
 Honolulu, HI 96843

Attn: Erwin Kawata  
 Phone: 808-748-5091

Client ID: HONOLULU  
 Folder #: 976378  
 Project: RED-HILL  
 Sample Group: Red-Hill Expanded List  
 (Albuquerque+)  
 Project Manager: Debbie L Frank  
 Phone: (626) 386-1149  
 PO #: C20525101 exp 05312023

The following samples were received from you on **December 21, 2021 at 1309**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
202112210216	HALAWA WELL P2	12/20/2021 0953
	@625A_Physis C @625BN_Physis C @625PAH_Physis_TICS_C @8015 Ethanol_Subbed @VOASDWA C plus plus TICs C (SUB)Gas Fraction Hydrocarbons Miscellaneous Charges TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	
202112210217	TRAVEL BLANK	12/20/2021 0953
	@VOASDWA C plus plus TICs TBC (SUB)Gas Fraction Hydrocarbons	

#### Test Description

- @625A\_Physis C -- 625 Acid Extractable in ug/L
- @625BN\_Physis C -- 625 Base Neutral Extractable in ug/L
- @625PAH\_Physis\_TICS\_C -- 625PAH in ug/L
- @8015 Ethanol\_Subbed -- Ethanol
- @VOASDWA C plus plus TICs C -- Volatile Organics by GCMS
- @VOASDWA C plus plus TICs TBC -- Volatile Organics by GCMS



Eaton Analytical

# CHAIN OF CUSTODY RECORD

976378

EUROFINS EATON ANALYTICAL USE ONLY:

750 Royal Oaks Drive, Suite 100  
 Monrovia, CA 91016-3629  
 Phone: 626 386 1100  
 Fax: 626 386 1101  
 800 566 LABS (800 566 5227)

LOGIN COMMENTS: \_\_\_\_\_

SAMPLES CHECKED AGAINST COC BY: *[Signature]*

SAMPLES LOGGED IN BY: \_\_\_\_\_

SAMPLE TEMP RECEIVED AT:

Colton / No. California / Arizona

Monrovia

°C ( Compliance: 4 ± 2 °C )

1.9

°C ( Compliance: 4 ± 2 °C )

CONDITION OF BLUE ICE: Frozen  Thawed \_\_\_\_\_

Wet Ice \_\_\_\_\_

No Ice \_\_\_\_\_

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

SAMPLES REC'D DAY OF COLLECTION?  (check for yes)

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: BWS HONOLULU

PROJECT CODE: RED HILL

SAMPLE GROUP: \_\_\_\_\_

STD \_\_\_ 1 wk \_\_\_ X \_\_\_ 3 day \_\_\_ 2 day \_\_\_ 1 day

COMPLIANCE SAMPLES  NON-COMPLIANCE SAMPLES  (check for yes)

- Requires state forms REGULATION INVOLVED: \_\_\_\_\_

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

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

list 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	SEAW = Sea Water WW = Waste Water	BW = Bottled Water SW = Storm Water	SO = Soil SL = Sludge	DATE	TIME	Temp Blank: _____ °C	SAMPLER COMMENTS
12/20/21	0933	Halawa Wells P2	H10000331-024	CFW						20 Dec. 2021	1400		

\* MATRIX TYPES: RSW = Raw Surface Water, RGW = Raw Ground Water, CFW = Chlor(am)inated Finished Water, FW = Other Finished Water

SAMPLED BY: *[Signature]* PRINT NAME: Low Bailey

RELINQUISHED BY: *[Signature]* PRINT NAME: Low Bailey

RECEIVED BY: *[Signature]* SIGNATURE: *[Signature]*

COMPANY/TITLE: Honolulu Board of Water Supply

DATE: 20 Dec. 2021

TIME: 1400

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

Created Date & Time: 12/10/2021 6:27:05PM

**Note: Sampler Please return this paper with your samples**

Kit #: 307664 

Client ID: HONOLULU 

Created By: Davis Haley - [B6AN]  
 Deliver By: 12/17/2021  
 STG: Bottle Orders  
 Ice Type: G

Project Code: RED-HILL Bottle Orders  
 Group Name: Red-Hill Expanded List (Albuquerque+)  
 PO#/JOB#: C20525101 exp 05312023  
 Description: Stock - HALAWA WELLS UNITS 1

**Ship Sample Kits to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Chemistry Lab  
 Honolulu, HI 96843  
 Attn: Ron Fenstermacher  
 Phone: 808-748-5841  
 Fax: 808-550-5572

**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 #
1	@625A_Physis C, @625BN_Physis C, @625PAH_Physis_TICS_C 4 - 1L amber glass [ 1 ml Thio 8% ]	4	
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel5_C, TPH 8015 Jet Fuel8_C	6	
1	8015 Gas_C	3	
1	8015 Gas_C TB	2	
1	@VOASDWA C plus plus TICs TBC	3	UN1789
1	@VOASDWA C plus plus TICs C	3	UN1789
1	@8015 Ethanol_Subbed	3	
<b>Sum Tests: 7</b>			

**Sum Bottles: 24**

**Comments**  
 AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)

**SAMPLER:**  
 Four 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Six 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.

**SHIPPING:**  
 Travel Blanks - TBAM/TBE, VOASDWA - Prepare TBs in the VOA LAB.  
 Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Container Labels)

ASM: Be sure to coordinate Follow-up as needed for any new detections in Field samples.  
 Acetone - follow-ups need to use EPA 624



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 976378

### 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 = 630 (Observation = 2.1 °C) (Corr. Factor -0.2 °C) (Final = 1.9 °C)

TYPE OF ICE: Real  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:

- 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 (see below):  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, 532LIMS, 556, 558, Anatoxin, LCMS methods using 40 ml vials, International clients:

Samp ID	Bottle #	mm	>6mm	Test	Samp ID	Bottle #	mm	>6mm	Test	Samp ID	Bottle #	mm	>6mm	Test

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

RECEIVED BY: <u>[Signature]</u>	SIGNATURE	PRINT NAME: <u>Wesley Passmore</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>12-21-21</u>	TIME: <u>1220</u>
SAMPLES CHECKED AGAINST COC BY: <u>[Signature]</u>	SIGNATURE	PRINT NAME: _____	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: _____	TIME: _____

ORIGIN ID: HKA (808) 748-5840  
BWS CHEMILAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S BERETANIA ST  
CHEMICAL LABORATORY  
HONOLULU, HI 96843  
UNITED STATES US

SHIP DATE: 20DEC21  
ACTWGT: 64.00 LB  
CAD: 100205419/NET4400  
BILL RECEIPT

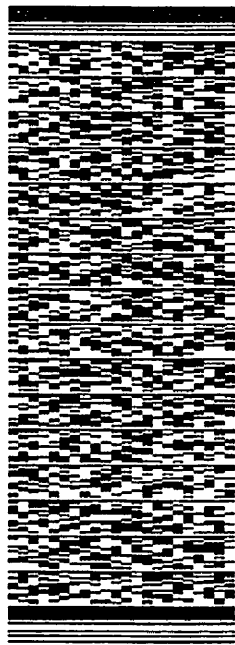
TO C CHUCK

EUROFINS EATON ANALYTICAL, INC  
750 ROYAL OAKS DR  
SUITE 100

MONROVIA CA 91016

REF: (626) 386-1178  
INV

DEPT



56D.J3/E934/FE4A

TUE - 21 DEC 11:30A

PRIORITY OVERNIGHT

10 of 10

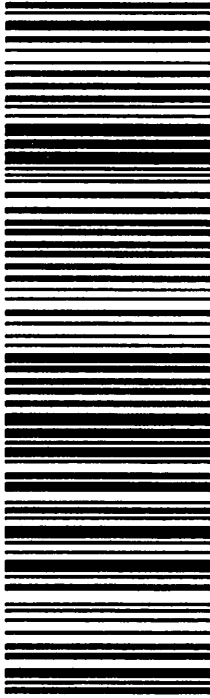
NPS# 7755 5684 8478  
0263

Mstr# 7755 5684 6854

0201

WZ WHPA

CA-US 91016  
BUR



**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843

**Folder Comments**

Results for 625 ACIDs, BNA and PAHs are submitted by Physis Environmental in Anaheim CA  
 Results for Ethanol, TPH Gas, TPH Diesel, Motor Oil and Jet Fuels are submitted by Emax Laboratories

Subcontracted Data -- Please review Subcontractor's report in full. EEA enters Subcontractor data into EEA system for archive tracking purposes of final result. EEA reports results to 2 sigfig. See subcontractor's report for Qualifier definition.

ND reporting (subcontract lab reports)  
 MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported as ND, are ND at the RL.

Tentatively Identified compounds (TIC).  
 The analyte has been "tentatively identified" as present and the associated numerical value is the estimated concentration in the sample. The analytes are not positively identified or quantified. Presentation of results in this report does not indicate actual presence of the compound identified in the TIC summary. Information is for study purposes only.

@625mod (Low Level SVOCs by GCMS (PAH/BNA - Base/Neutral/Acid Extractables)  
 See subcontractor's report. Physis reports TICs in addendum report titled Total Ion Chromatogram.

@524.2 (VOC by GCMS)  
 202112210216      524.2    TICs    None Detected  
 202112210217  

Compound	Estimated Retention Time	Estimated Concentration
Furfural	9.584min	2.1 ug/L

Project change per communication with Erwin Kawata, 071718  
 Ethanol - ELLE method 1671 2000 ug/L. EMAX method 8015, RL 2000 ug/L. MRLs are the same.  
 MTBE - 524.3 0.02 ug/L (20 ng/L) is not reported, method decommissioned. See 524.2 at elevated RL of 0.5 ug/L.  
 TBA - 524.3 1 ug/L is not reported, method decommissioned. See 524.2 at elevated RL of 2 ug/L  
 ACETONE MRL elevated to 500 due to matrix artifact of preservation, project spec change Erwin Kawata. 021821

**Flags Legend:**

BM - Target analyte detected in method blank above the MDL, but below the minimum reporting limit (MRL) and

**The Comments Report may be blank if there are no comments for this report.**

Tel: (626) 386-1100  
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**Laboratory Comments**

**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
(Albuquerque+)

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

---

analyte not present in the sample, no impact on data.

FB - Target analyte detected in TB > MRL but sample is ND.

L1 - The associated blank spike recovery was above laboratory acceptance limits.

LK - The associated blank spike recovery was above method acceptance limits. This target analyte was not detected in the sample.

LM - MRL Check recovery was above laboratory acceptance limits. This target analyte was not detected in the sample.

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(Albuquerque+)

**Honolulu Board of Water Supply**  
Erwin Kawata  
630 South Beretania Street  
Public Service Bldg." Room 308  
Honolulu, HI 96843

Samples Received on:  
12/21/2021 1309

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL
12/26/2021 00:00	Benzoic acid	<u>HALAWA WELL P2</u>	4.34		ug/L	0.2

Tel: (626) 386-1100  
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**Report:** 976378  
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 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b>HALAWA WELL P2 (202112210216)</b>						<b>Sampled on 12/20/2021 0953</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
12/22/21	12/22/21 21:07			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>									
12/27/21	12/29/21 16:31			(SW 8015B)	TPH Diesel	ND	mg/L	0.025	1
12/27/21	12/29/21 16:31			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.051	1
<b>EPA 8015 - Jet Fuel 5 C8-C18</b>									
12/27/21	12/29/21 16:31			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.051	1
<b>EPA 625 - 625PAH in ug/L</b>									
12/22/21	12/26/21 00:00			(EPA 625)	1-Methylnaphthalene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	1-Methylphenanthrene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	2,3,5-Trimethylnaphthalene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	2,4,6-Trichlorophenol	NA	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,6-Dimethylnaphthalene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	2-Methylnaphthalene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Acenaphthene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Acenaphthylene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Anthracene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benz(a)Anthracene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzo(a)pyrene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzo(b)fluoranthene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzo(e)pyrene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzo(g,h,i)perylene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzo(k)fluoranthene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Biphenyl	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Chrysene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Dibenz(a,h)Anthracene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Dibenzo(a,l)pyrene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Dibenzothiophene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Fluoranthene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Fluorene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Indeno(1,2,3,c,d)Pyrene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Naphthalene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Pentachlorophenol	NA	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Perylene	ND	ug/L	0.005	1
12/22/21	12/26/21 00:00			(EPA 625)	Phenanthrene	ND	ug/L	0.005	1

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**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg." Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/22/21	12/26/21 00:00			(EPA 625)	Pyrene	ND	ug/L	0.005	1
<b>EPA 8015 - Jet Fuel 8 C8-C18</b>									
	12/29/21 16:31			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.051	1
<b>EPA 625 - 625 Acid Extractable in ug/L</b>									
12/22/21	12/26/21 00:00			(EPA 625)	2,4,5-Trichlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,4,6-Trichlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,4-Dichlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,4-Dinitrophenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	2,6-Dichlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,6-Di-tert-butyl-4-methylphenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2,6-Di-tert-butylphenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2-Chlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2-Methylphenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	2-Nitrophenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	4,6-Dinitro-2-methylphenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Chloro-3-methyl phenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Methylphenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Nitrophenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	6-tert-Butyl-2,4-dimethylphenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzoic acid	4.34	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzyl alcohol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	pentachlorophenol	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Phenol	ND	ug/L	0.2	1
12/22/21	12/26/21 00:00			(EPA 625)	p-tert-Butylphenol	ND	ug/L	0.1	1
<b>EPA 625 - 625 Base Neutral Extractable in ug/L</b>									
12/22/21	12/26/21 00:00			(EPA 625)	2-Chloronaphthalene	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	2-Nitroaniline	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	3-Nitroaniline	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Bromophenylphenyl Ether	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Chlorophenylphenyl Ether	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	4-Nitroaniline	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Aniline	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Benzidine	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	bis(2-Chloroethoxy)methane	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	bis(2-Chloroethyl)ether	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	bis(2-Chloroisopropyl) ether	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Dibenzofuran	ND	ug/L	0.1	1

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 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/22/21	12/26/21 00:00			(EPA 625)	Disalicylideneopropanediamine	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Hexachloroethane	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	Nitrobenzene	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	N-Nitrosodi-N-propylamine	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	N-Nitrosodiphenylamine	ND	ug/L	0.1	1
12/22/21	12/26/21 00:00			(EPA 625)	p-Chloroaniline	ND	ug/L	0.1	1
<b>SW8015C - Ethanol</b>									
	12/22/21 11:40			(SW8015C)	Ethanol	ND	ug/L	2000	1
<b>EPA 524.2 - Volatile Organics by GCMS</b>									
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	2-Hexanone	ND	ug/L	10	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Acetone	ND (FB,LM)	ug/L	500	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1

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12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Dichlorodifluoromethane	ND (LK)	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Toluene	ND (BM)	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1

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Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	1,2-Dichloroethane-d4	108	%		1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	4-Bromofluorobenzene	102	%		1
12/28/21	12/29/21 04:13	1376546	1376547	(EPA 524.2)	Toluene-d8	97	%		1

**TRAVEL BLANK (202112210217)**

Sampled on 12/20/2021 0953

**SW 8015B - (SUB)Gas Fraction Hydrocarbons**

12/22/21	12/22/21 21:43			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
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**EPA 524.2 - Volatile Organics by GCMS**

12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1,1-Trichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1,2-Trichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1-Dichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,1-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2,3-Trichlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2,3-Trichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2,4-Trichlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2,4-Trimethylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2-Dichloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,3,5-Trimethylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,3-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	2,2-Dichloropropane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	2-Butanone (MEK)	ND	ug/L	5.0	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	2-Hexanone	ND	ug/L	10	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5.0	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Acetone	ND (FB,L1)	ug/L	500	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Benzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromochloromethane	ND	ug/L	0.50	1

Rounding on totals after summation.  
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Tel: (626) 386-1100  
 Fax: (866) 988-3757  
 1 800 566 LABS (1 800 566 5227)

**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromodichloromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromoethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromoform	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Bromomethane (Methyl Bromide)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Carbon disulfide	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Carbon Tetrachloride	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Chlorobenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Chlorodibromomethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Chloroethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Chloroform (Trichloromethane)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Chloromethane(Methyl Chloride)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	cis-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	cis-1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Dibromomethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Dichlorodifluoromethane	ND (LK)	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Dichloromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Di-isopropyl ether	ND	ug/L	3.0	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Ethyl benzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Hexachlorobutadiene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Isopropylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	m,p-Xylenes	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	m-Dichlorobenzene (1,3-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Naphthalene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	n-Butylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	n-Propylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	o-Chlorotoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	o-Xylene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	p-Chlorotoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	p-Isopropyltoluene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	sec-Butylbenzene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Styrene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	tert-amyl Methyl Ether	ND	ug/L	3.0	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	tert-Butyl Ethyl Ether	ND	ug/L	3.0	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	tert-Butylbenzene	ND	ug/L	0.50	1

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Laboratory Data

**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
 (Albuquerque+)

**Honolulu Board of Water Supply**  
 Erwin Kawata  
 630 South Beretania Street  
 Public Service Bldg.” Room 308  
 Honolulu, HI 96843

Samples Received on:  
 12/21/2021 1309

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Tetrachloroethylene (PCE)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Toluene	ND (BM)	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Total 1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Total THM	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Total xylenes	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	trans-1,2-Dichloroethylene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	trans-1,3-Dichloropropene	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Trichloroethylene (TCE)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Trichlorofluoromethane	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Trichlorotrifluoroethane(Freon 113)	ND	ug/L	0.50	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Vinyl chloride (VC)	ND	ug/L	0.30	1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	1,2-Dichloroethane-d4	106	%		1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	4-Bromofluorobenzene	99	%		1
12/28/21	12/29/21 02:23	1376546	1376547	(EPA 524.2)	Toluene-d8	95	%		1

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**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
(Albuquerque+)

Honolulu Board of Water Supply

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**Volatile Organics by GCMS**

**Prep Batch: 1376546 Analytical Batch: 1376547**

202112210216	HALAWA WELL P2
202112210217	TRAVEL BLANK

**Analysis Date: 12/29/2021**

Analyzed by: TR7W  
Analyzed by: TR7W

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 Fax: (626) 988-3757  
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Report: 976378  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
<b>Volatile Organics by GCMS by EPA 524.2</b>									
<b>Analytical Batch: 1376547</b>					<b>Analysis Date: 12/28/2021</b>				
LCS1	1,1,1,2-Tetrachloroethane		5	4.85	ug/L	97	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5	5.02	ug/L	100	(70-130)	20	3.4
MBLK	1,1,1,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.650	ug/L	130	(50-150)		
LCS1	1,1,1-Trichloroethane		5	4.81	ug/L	96	(70-130)		
LCS2	1,1,1-Trichloroethane		5	4.85	ug/L	97	(70-130)	20	0.83
MBLK	1,1,1-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.430	ug/L	86	(50-150)		
LCS1	1,1,2,2-Tetrachloroethane		5	5.26	ug/L	105	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5	5.35	ug/L	107	(70-130)	20	1.7
MBLK	1,1,2,2-Tetrachloroethane			<0.5	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,1,2-Trichloroethane		5	4.90	ug/L	98	(70-130)		
LCS2	1,1,2-Trichloroethane		5	5.10	ug/L	102	(70-130)	20	4.0
MBLK	1,1,2-Trichloroethane			<0.5	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.440	ug/L	88	(50-150)		
LCS1	1,1-Dichloroethane		5	4.86	ug/L	97	(70-130)		
LCS2	1,1-Dichloroethane		5	4.86	ug/L	97	(70-130)	20	0.0
MBLK	1,1-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,1-Dichloroethylene		5	5.17	ug/L	103	(70-130)		
LCS2	1,1-Dichloroethylene		5	5.14	ug/L	103	(70-130)	20	0.58
MBLK	1,1-Dichloroethylene			<0.5	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.520	ug/L	104	(50-150)		
LCS1	1,1-Dichloropropene		5	4.90	ug/L	98	(70-130)		
LCS2	1,1-Dichloropropene		5	5.01	ug/L	100	(70-130)	20	2.2
MBLK	1,1-Dichloropropene			<0.5	ug/L				
MRL_CHK	1,1-Dichloropropene		0.5	0.480	ug/L	96	(50-150)		
LCS1	1,2,3-Trichlorobenzene		5	4.89	ug/L	98	(70-130)		
LCS2	1,2,3-Trichlorobenzene		5	5.28	ug/L	106	(70-130)	20	7.7
MBLK	1,2,3-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,3-Trichlorobenzene		0.5	0.490	ug/L	98	(50-150)		
LCS1	1,2,3-Trichloropropane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2,3-Trichloropropane		5	5.36	ug/L	107	(70-130)	20	2.1
MBLK	1,2,3-Trichloropropane			<0.5	ug/L				

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

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Report: 976378  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	1,2,3-Trichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,2,4-Trichlorobenzene		5	4.90	ug/L	98	(70-130)		
LCS2	1,2,4-Trichlorobenzene		5	5.17	ug/L	103	(70-130)	20	5.4
MBLK	1,2,4-Trichlorobenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trichlorobenzene		0.5	0.500	ug/L	100	(50-150)		
LCS1	1,2,4-Trimethylbenzene		5	4.24	ug/L	85	(70-130)		
LCS2	1,2,4-Trimethylbenzene		5	4.33	ug/L	87	(70-130)	20	2.1
MBLK	1,2,4-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,2,4-Trimethylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	1,2-Dichloroethane		5	5.09	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5	5.21	ug/L	104	(70-130)	20	2.3
MBLK	1,2-Dichloroethane			<0.5	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	1,2-Dichloroethane-d4 (S)		5	99.0	%	99	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)		5	99.8	%	100	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			99.6	%	100	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)		5	101	%	101	(70-130)		
MRLW	1,2-Dichloroethane-d4 (S)		5	105	%	105	(70-130)		
LCS1	1,2-Dichloropropane		5	5.25	ug/L	105	(70-130)		
LCS2	1,2-Dichloropropane		5	5.22	ug/L	104	(70-130)	20	0.57
MBLK	1,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.530	ug/L	106	(50-150)		
LCS1	1,3,5-Trimethylbenzene		5	4.51	ug/L	90	(70-130)		
LCS2	1,3,5-Trimethylbenzene		5	4.47	ug/L	89	(70-130)	20	0.89
MBLK	1,3,5-Trimethylbenzene			<0.5	ug/L				
MRL_CHK	1,3,5-Trimethylbenzene		0.5	0.400	ug/L	80	(50-150)		
LCS1	1,3-Dichloropropane		5	5.18	ug/L	104	(70-130)		
LCS2	1,3-Dichloropropane		5	5.21	ug/L	104	(70-130)	20	0.58
MBLK	1,3-Dichloropropane			<0.5	ug/L				
MRL_CHK	1,3-Dichloropropane		0.5	0.460	ug/L	92	(50-150)		
LCS1	2,2-Dichloropropane		5	3.92	ug/L	78	(70-130)		
LCS2	2,2-Dichloropropane		5	4.02	ug/L	80	(70-130)	20	2.5
MBLK	2,2-Dichloropropane			<0.5	ug/L				
MRL_CHK	2,2-Dichloropropane		0.5	0.460	ug/L	92	(50-150)		
LCS1	2-Butanone (MEK)		50	56.0	ug/L	112	(70-130)		
LCS2	2-Butanone (MEK)		50	55.3	ug/L	111	(70-130)	20	1.3
MBLK	2-Butanone (MEK)			<5.0	ug/L				
MRL_CHK	2-Butanone (MEK)		5	5.75	ug/L	115	(50-150)		

Spike recovery is already corrected for native results.  
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Report: 976378  
 Project: RED-HILL  
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Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	2-Hexanone		50	55.8	ug/L	112	(70-130)		
LCS2	2-Hexanone		50	56.1	ug/L	112	(70-130)	20	0.54
MBLK	2-Hexanone			<5.0	ug/L				
MRL_CHK	2-Hexanone		5	4.94	ug/L	99	(50-150)		
LCS1	4-Bromofluorobenzene (S)		5	94.6	%	95	(70-130)		
LCS2	4-Bromofluorobenzene (S)		5	96.4	%	96	(70-130)		
MBLK	4-Bromofluorobenzene (S)			105	%	105	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)		5	98.4	%	98	(70-130)		
MRL_LW	4-Bromofluorobenzene (S)		5	98.8	%	99	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	54.4	ug/L	109	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	55.9	ug/L	112	(70-130)	20	2.7
MBLK	4-Methyl-2-Pentanone (MIBK)			<5.0	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5	4.78	ug/L	96	(50-150)		
LCS1	Acetone		50	54.4	ug/L	109	(70-130)		
LCS2	Acetone		50	54.3	ug/L	109	(70-130)	20	0.18
MBLK	Acetone			<10	ug/L				
MRL_CHK	Acetone		5	7.80	ug/L	<u>156</u>	(50-150)		
LCS1	Benzene		5	5.00	ug/L	100	(70-130)		
LCS2	Benzene		5	5.08	ug/L	102	(70-130)	20	1.6
MBLK	Benzene			<0.5	ug/L				
MRL_CHK	Benzene		0.5	0.510	ug/L	102	(50-150)		
LCS1	Bromobenzene		5	4.71	ug/L	94	(70-130)		
LCS2	Bromobenzene		5	4.78	ug/L	96	(70-130)	20	1.5
MBLK	Bromobenzene			<0.5	ug/L				
MRL_CHK	Bromobenzene		0.5	0.480	ug/L	96	(50-150)		
LCS1	Bromochloromethane		5	4.48	ug/L	90	(70-130)		
LCS2	Bromochloromethane		5	4.52	ug/L	90	(70-130)	20	0.89
MBLK	Bromochloromethane			<0.5	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.580	ug/L	116	(50-150)		
LCS1	Bromodichloromethane		5	5.30	ug/L	106	(70-130)		
LCS2	Bromodichloromethane		5	5.34	ug/L	107	(70-130)	20	0.75
MBLK	Bromodichloromethane			<0.5	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.380	ug/L	76	(50-150)		
LCS1	Bromoethane		5	5.12	ug/L	102	(70-130)		
LCS2	Bromoethane		5	5.04	ug/L	101	(70-130)	20	1.6
MBLK	Bromoethane			<0.5	ug/L				
MRL_CHK	Bromoethane		0.5	0.520	ug/L	104	(50-150)		
LCS1	Bromoform		5	4.31	ug/L	86	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

(S) - Indicates surrogate compound.

(I) - Indicates internal standard compound.

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Report: 976378  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS2	Bromoform		5	4.55	ug/L	91	(70-130)	20	5.4
MBLK	Bromoform			<0.5	ug/L				
MRL_CHK	Bromoform		0.5	0.540	ug/L	108	(50-150)		
LCS1	Bromomethane (Methyl Bromide)		5	5.25	ug/L	105	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5	5.40	ug/L	108	(70-130)	20	2.8
MBLK	Bromomethane (Methyl Bromide)			<0.5	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.470	ug/L	94	(50-150)		
LCS1	Carbon disulfide		5	5.50	ug/L	110	(70-130)		
LCS2	Carbon disulfide		5	5.60	ug/L	112	(70-130)	20	1.8
MBLK	Carbon disulfide			<0.5	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.400	ug/L	80	(50-150)		
LCS1	Carbon Tetrachloride		5	5.23	ug/L	105	(70-130)		
LCS2	Carbon Tetrachloride		5	5.24	ug/L	105	(70-130)	20	0.19
MBLK	Carbon Tetrachloride			<0.5	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.450	ug/L	90	(50-150)		
LCS1	Chlorobenzene		5	5.17	ug/L	103	(70-130)		
LCS2	Chlorobenzene		5	5.05	ug/L	101	(70-130)	20	2.4
MBLK	Chlorobenzene			<0.5	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.440	ug/L	88	(50-150)		
LCS1	Chlorodibromomethane		5	4.79	ug/L	96	(70-130)		
LCS2	Chlorodibromomethane		5	5.03	ug/L	101	(70-130)	20	4.9
MBLK	Chlorodibromomethane			<0.5	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.690	ug/L	138	(50-150)		
LCS1	Chloroethane		5	4.91	ug/L	98	(70-130)		
LCS2	Chloroethane		5	4.88	ug/L	98	(70-130)	20	0.61
MBLK	Chloroethane			<0.5	ug/L				
MRL_CHK	Chloroethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Chloroform (Trichloromethane)		5	4.91	ug/L	98	(70-130)		
LCS2	Chloroform (Trichloromethane)		5	4.91	ug/L	98	(70-130)	20	0.0
MBLK	Chloroform (Trichloromethane)			<0.5	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.560	ug/L	112	(50-150)		
LCS1	Chloromethane(Methyl Chloride)		5	5.38	ug/L	108	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5	5.40	ug/L	108	(70-130)	20	0.37
MBLK	Chloromethane(Methyl Chloride)			<0.5	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.570	ug/L	114	(50-150)		
LCS1	cis-1,2-Dichloroethylene		5	4.94	ug/L	99	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5	4.96	ug/L	99	(70-130)	20	0.40
MBLK	cis-1,2-Dichloroethylene			<0.5	ug/L				

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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Report: 976378  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.490	ug/L	98	(50-150)		
LCS1	cis-1,3-Dichloropropene		5	4.64	ug/L	93	(70-130)		
LCS2	cis-1,3-Dichloropropene		5	4.68	ug/L	94	(70-130)	20	0.86
MBLK	cis-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.690	ug/L	138	(50-150)		
LCS1	Dibromomethane		5	4.87	ug/L	97	(70-130)		
LCS2	Dibromomethane		5	4.93	ug/L	99	(70-130)	20	1.2
MBLK	Dibromomethane			<0.5	ug/L				
MRL_CHK	Dibromomethane		0.5	0.530	ug/L	106	(50-150)		
LCS1	Dichlorodifluoromethane		5	6.58	ug/L	<u>132</u>	(70-130)		
LCS2	Dichlorodifluoromethane		5	6.56	ug/L	<u>131</u>	(70-130)	20	0.30
MBLK	Dichlorodifluoromethane			<0.5	ug/L				
MRL_CHK	Dichlorodifluoromethane		0.5	0.470	ug/L	94	(50-150)		
LCS1	Dichloromethane		5	4.91	ug/L	98	(70-130)		
LCS2	Dichloromethane		5	4.88	ug/L	98	(70-130)	20	0.61
MBLK	Dichloromethane			<0.5	ug/L				
MRL_CHK	Dichloromethane		0.5	0.540	ug/L	108	(50-150)		
LCS1	Di-isopropyl ether		5	4.90	ug/L	98	(70-130)		
LCS2	Di-isopropyl ether		5	5.03	ug/L	101	(70-130)	20	2.6
MBLK	Di-isopropyl ether			<3.0	ug/L				
MRL_CHK	Di-isopropyl ether		0.5	0.530	ug/L	106	(50-150)		
LCS1	Ethyl benzene		5	5.05	ug/L	101	(70-130)		
LCS2	Ethyl benzene		5	5.21	ug/L	104	(70-130)	20	3.1
MBLK	Ethyl benzene			<0.5	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.450	ug/L	90	(50-150)		
LCS1	Hexachlorobutadiene		5	4.66	ug/L	93	(70-130)		
LCS2	Hexachlorobutadiene		5	5.07	ug/L	101	(70-130)	20	8.4
MBLK	Hexachlorobutadiene			<0.5	ug/L				
MRL_CHK	Hexachlorobutadiene		0.5	0.460	ug/L	92	(50-150)		
LCS1	Isopropylbenzene		5	4.73	ug/L	95	(70-130)		
LCS2	Isopropylbenzene		5	4.78	ug/L	96	(70-130)	20	1.1
MBLK	Isopropylbenzene			<0.5	ug/L				
MRL_CHK	Isopropylbenzene		0.5	0.430	ug/L	86	(50-150)		
LCS1	m,p-Xylenes		10	9.90	ug/L	99	(70-130)		
LCS2	m,p-Xylenes		10	10.0	ug/L	100	(70-130)	20	1.0
MBLK	m,p-Xylenes			<0.5	ug/L				
MRL_CHK	m,p-Xylenes		1	0.780	ug/L	78	(50-150)		
MRLW	m,p-Xylenes		0.5	0.370	ug/L	74	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
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Report: 976378  
 Project: RED-HILL  
 Group: Red-Hill Expanded List  
 (Albuquerque+)

Honolulu Board of Water Supply

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
LCS1	m-Dichlorobenzene (1,3-DCB)		5	4.78	ug/L	96	(70-130)		
LCS2	m-Dichlorobenzene (1,3-DCB)		5	4.79	ug/L	96	(70-130)	20	0.21
MBLK	m-Dichlorobenzene (1,3-DCB)			<0.5	ug/L				
MRL_CHK	m-Dichlorobenzene (1,3-DCB)		0.5	0.470	ug/L	94	(50-150)		
LCS1	Methyl Tert-butyl ether (MTBE)		5	5.00	ug/L	100	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5	5.03	ug/L	101	(70-130)	20	0.60
MBLK	Methyl Tert-butyl ether (MTBE)			<0.5	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Naphthalene		5	4.71	ug/L	94	(70-130)		
LCS2	Naphthalene		5	5.01	ug/L	100	(70-130)	20	6.2
MBLK	Naphthalene			<0.5	ug/L				
MRL_CHK	Naphthalene		0.5	0.450	ug/L	90	(50-150)		
LCS1	n-Butylbenzene		5	4.52	ug/L	90	(70-130)		
LCS2	n-Butylbenzene		5	4.75	ug/L	95	(70-130)	20	5.0
MBLK	n-Butylbenzene			<0.5	ug/L				
MRL_CHK	n-Butylbenzene		0.5	0.460	ug/L	92	(50-150)		
LCS1	n-Propylbenzene		5	4.63	ug/L	93	(70-130)		
LCS2	n-Propylbenzene		5	4.67	ug/L	93	(70-130)	20	0.86
MBLK	n-Propylbenzene			<0.5	ug/L				
MRL_CHK	n-Propylbenzene		0.5	0.420	ug/L	84	(50-150)		
LCS1	o-Chlorotoluene		5	4.49	ug/L	90	(70-130)		
LCS2	o-Chlorotoluene		5	4.64	ug/L	93	(70-130)	20	3.3
MBLK	o-Chlorotoluene			<0.5	ug/L				
MRL_CHK	o-Chlorotoluene		0.5	0.410	ug/L	82	(50-150)		
LCS1	o-Dichlorobenzene (1,2-DCB)		5	5.07	ug/L	101	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5	5.26	ug/L	105	(70-130)	20	3.7
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.5	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.480	ug/L	96	(50-150)		
LCS1	o-Xylene		5	4.78	ug/L	96	(70-130)		
LCS2	o-Xylene		5	4.90	ug/L	98	(70-130)	20	2.5
MBLK	o-Xylene			<0.5	ug/L				
MRL_CHK	o-Xylene		0.5	0.410	ug/L	82	(50-150)		
LCS1	p-Chlorotoluene		5	4.79	ug/L	96	(70-130)		
LCS2	p-Chlorotoluene		5	5.01	ug/L	100	(70-130)	20	4.5
MBLK	p-Chlorotoluene			<0.5	ug/L				
MRL_CHK	p-Chlorotoluene		0.5	0.440	ug/L	88	(50-150)		
LCS1	p-Dichlorobenzene (1,4-DCB)		5	4.72	ug/L	94	(70-130)		
LCS2	p-Dichlorobenzene (1,4-DCB)		5	4.68	ug/L	94	(70-130)	20	0.85

Spike recovery is already corrected for native results.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.5	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.460	ug/L	92	(50-150)		
LCS1	p-Isopropyltoluene		5	4.51	ug/L	90	(70-130)		
LCS2	p-Isopropyltoluene		5	4.54	ug/L	91	(70-130)	20	0.66
MBLK	p-Isopropyltoluene			<0.5	ug/L				
MRL_CHK	p-Isopropyltoluene		0.5	0.380	ug/L	76	(50-150)		
LCS1	sec-Butylbenzene		5	4.62	ug/L	92	(70-130)		
LCS2	sec-Butylbenzene		5	4.72	ug/L	94	(70-130)	20	2.1
MBLK	sec-Butylbenzene			<0.5	ug/L				
MRL_CHK	sec-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Styrene		5	4.81	ug/L	96	(70-130)		
LCS2	Styrene		5	4.95	ug/L	99	(70-130)	20	2.9
MBLK	Styrene			<0.5	ug/L				
MRL_CHK	Styrene		0.5	0.360	ug/L	72	(50-150)		
LCS1	tert-amyl Methyl Ether		5	4.70	ug/L	94	(70-130)		
LCS2	tert-amyl Methyl Ether		5	4.86	ug/L	97	(70-130)	20	3.4
MBLK	tert-amyl Methyl Ether			<3.0	ug/L				
MRL_CHK	tert-amyl Methyl Ether		0.5	0.450	ug/L	90	(50-150)		
LCS1	tert-Butyl Ethyl Ether		5	4.98	ug/L	100	(70-130)		
LCS2	tert-Butyl Ethyl Ether		5	5.03	ug/L	101	(70-130)	20	1
MBLK	tert-Butyl Ethyl Ether			<3.0	ug/L				
MRL_CHK	tert-Butyl Ethyl Ether		0.5	0.510	ug/L	102	(50-150)		
LCS1	tert-Butylbenzene		5	4.55	ug/L	91	(70-130)		
LCS2	tert-Butylbenzene		5	4.73	ug/L	95	(70-130)	20	3.9
MBLK	tert-Butylbenzene			<0.5	ug/L				
MRL_CHK	tert-Butylbenzene		0.5	0.390	ug/L	78	(50-150)		
LCS1	Tetrachloroethylene (PCE)		5	5.06	ug/L	101	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5	5.01	ug/L	100	(70-130)	20	0.99
MBLK	Tetrachloroethylene (PCE)			<0.5	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.480	ug/L	96	(50-150)		
LCS1	Toluene		5	5.29	ug/L	106	(70-130)		
LCS2	Toluene		5	5.34	ug/L	107	(70-130)	20	0.94
MBLK	Toluene			<0.5	ug/L				
MRL_CHK	Toluene		0.5	0.630	ug/L	126	(50-150)		
LCS1	Toluene-d8 (S)		5	103	%	103	(70-130)		
LCS2	Toluene-d8 (S)		5	103	%	103	(70-130)		
MBLK	Toluene-d8 (S)			92.8	%	93	(70-130)		
MRL_CHK	Toluene-d8 (S)		5	97.4	%	97	(70-130)		

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

RPD not calculated for LCS2 when different a concentration than LCS1 is used.

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).

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QC Type	Analyte	Native	Spiked	Recovered	Units	Yield(%)	Limits (%)	RPD Limit(%)	RPD%
MRLW	Toluene-d8 (S)		5	97.4	%	97	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5	5.16	ug/L	103	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5	5.17	ug/L	103	(70-130)	20	0.19
MBLK	trans-1,2-Dichloroethylene			<0.5	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.520	ug/L	104	(50-150)		
LCS1	trans-1,3-Dichloropropene		5	4.33	ug/L	87	(70-130)		
LCS2	trans-1,3-Dichloropropene		5	4.42	ug/L	88	(70-130)	20	2.1
MBLK	trans-1,3-Dichloropropene			<0.5	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.710	ug/L	142	(50-150)		
LCS1	Trichloroethylene (TCE)		5	5.11	ug/L	102	(70-130)		
LCS2	Trichloroethylene (TCE)		5	5.10	ug/L	102	(70-130)	20	0.20
MBLK	Trichloroethylene (TCE)			<0.5	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.460	ug/L	92	(50-150)		
LCS1	Trichlorofluoromethane		5	4.88	ug/L	98	(70-130)		
LCS2	Trichlorofluoromethane		5	5.11	ug/L	102	(70-130)	20	4.6
MBLK	Trichlorofluoromethane			<0.5	ug/L				
MRL_CHK	Trichlorofluoromethane		0.5	0.480	ug/L	96	(50-150)		
LCS1	Trichlorotrifluoroethane(Freon)		5	5.15	ug/L	103	(70-130)		
LCS2	Trichlorotrifluoroethane(Freon)		5	5.15	ug/L	103	(70-130)	20	0.0
MBLK	Trichlorotrifluoroethane(Freon)			<0.5	ug/L				
MRL_CHK	Trichlorotrifluoroethane(Freon)		0.5	0.500	ug/L	100	(50-150)		
LCS1	Vinyl chloride (VC)		5	5.52	ug/L	110	(70-130)		
LCS2	Vinyl chloride (VC)		5	5.53	ug/L	111	(70-130)	20	0.18
MBLK	Vinyl chloride (VC)			<0.3	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.480	ug/L	96	(50-150)		
MRLW	Vinyl chloride (VC)		0.25	0.260	ug/L	104	(50-150)		

Spike recovery is already corrected for native results.  
 Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.  
 Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.  
 RPD not calculated for LCS2 when different a concentration than LCS1 is used.  
 RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level).  
 (S) - Indicates surrogate compound.  
 (I) - Indicates internal standard compound.

Tel: (626) 386-1100  
Fax: (626) 988-3757  
1 800 566 LABS (1 800 566 5227)

**Report:** 976378  
**Project:** RED-HILL  
**Group:** Red-Hill Expanded List  
(Albuquerque+)

**Honolulu Board of Water Supply**  
Erwin Kawata  
630 South Beretania Street  
Public Service Bldg.” Room 308  
Honolulu, HI 96843

Samples Received on:  
12/21/2021 1309

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
12/26/2021 00:00	Benzoic acid	<u>HALAWA WELL P2</u>	4.34		ug/L	0.2



3051 Fujita Street  
Torrance, CA 90505  
Tel: (310)-618-8889

Date: 01-13-2022  
EMAX Batch No.: 21L253

Attn: Jackie Contreras

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

Subject: Laboratory Report  
Project: 976378

Enclosed is the Laboratory report for samples received on 12/22/21.  
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202112210216	L253-01	12/20/21	WATER	ETHANOL TPH GASOLINE TPH
202112210216MS	L253-01M	12/20/21	WATER	ETHANOL TPH GASOLINE TPH DIESEL
202112210216MSD	L253-01S	12/20/21	WATER	ETHANOL TPH GASOLINE TPH DIESEL
202112210217	L253-02	12/20/21	WATER	TPH GASOLINE

The results are summarized on the following pages.

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

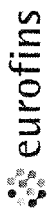
Sincerely yours,

Caspar J. Pang  
Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

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



Eaton Analytical

Ship To:  
EMAX Laboratories, Inc.  
3051 Fujita St.  
Torrance, CA 90505

Phone: 310-618-8889 Fax: 310-618-0818

Folder #: 976378 Report Due: 12/28/2021

Sample ID: 202112210216 Client Sample ID for reference on: HALAWA WELL P2

Sample type: Sample Event: Analysis Requested

- Method SW8015C Ethanol
- SW 8015B (SUB)Gas Fraction Hydrocarbons
- SW 8015B EPA 5030C TPH 8015 Diesel and Motor Oil
- EPA 8015 EPA 3550B Jet Fuel 5 C8-C18
- EPA 8015 Jet Fuel 8 C8-C18

Sample ID: 202112210217 Client Sample ID for reference on: TRAVEL BLANK

Sample type: Sample Event: Analysis Requested

- Method SW 8015B EPA 5030C (SUB)Gas Fraction Hydrocarbons

Relinquished by: *W. L. Lopez* Sample Control Date: 12/21/21 Time: 15:20

Received by: *Jackie* Date: 12/22/21 Time: 9:10

Relinquished by: Sample Control Date: Time:

Received by: Sample Control Date: Time:

12/22/21 0910

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp: 1.6°

### Submittal Form

Date: 12/21/2021

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder # 976378 Job # 1000014

211253

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

Reports: Jackie Contreras Sub-Contracting Administrator  
 EMAIL TO: Eaton-MonroviaSubContract@eurofins.com  
 Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016  
 Phone (626) 386-1165 Fax (626) 386-1122  
 Invoices to: Eurofins Eaton Analytical, LLC  
 Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix.

Samples from: HAWAII

rush

Sample Date & Time Matrix: 12/20/21 0953 DW Clip Code: PWSID: JLS

Sample Point ID: Static ID:

Sample Date & Time Matrix: 12/20/21 0953 DW Clip Code: PWSID: JLS

Sample Point ID: Static ID:

Type of Delivery <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others	Airbill / Tracking Number	ECN <u>21L253</u>
<input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery		Recipient <u>Jocelyne Solis-Ramos</u>
		Date <u>12/22/21</u> Time <u>9:10</u>

**COC INSPECTION**

<input checked="" type="checkbox"/> Client Name	<input checked="" type="checkbox"/> Client PM/FC	<input type="checkbox"/> Sampler Name	<input checked="" type="checkbox"/> Sampling Date/Time	<input checked="" type="checkbox"/> Sample ID	<input checked="" type="checkbox"/> Matrix
<input checked="" type="checkbox"/> Address	<input checked="" type="checkbox"/> Tel # / Fax #	<input type="checkbox"/> Courier Signature	<input checked="" type="checkbox"/> Analysis Required	<input type="checkbox"/> Preservative (if any)	<input checked="" type="checkbox"/> TAT
Safety Issues (if any)	<input type="checkbox"/> High concentrations expected	<input type="checkbox"/> From Superfund Site	<input type="checkbox"/> Rad screening required		

Note: \_\_\_\_\_

**PACKAGING INSPECTION**

Container	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> Other
Condition	<input type="checkbox"/> Custody Seal	<input type="checkbox"/> Intact	<input type="checkbox"/> Damaged
Packaging	<input checked="" type="checkbox"/> Bubble Pack	<input type="checkbox"/> Styrofoam	<input type="checkbox"/> Popcorn
Temperatures (Cool, ≤6 °C but not frozen)	<input checked="" type="checkbox"/> Cooler 1 <u>1.0</u> °C	<input type="checkbox"/> Cooler 2 _____ °C	<input type="checkbox"/> Cooler 3 _____ °C
	<input type="checkbox"/> Cooler 6 _____ °C	<input type="checkbox"/> Cooler 7 _____ °C	<input type="checkbox"/> Cooler 8 _____ °C
Thermometer: A - S/N <u>210191066</u> a 12/14 (B) S/N <u>210271396</u>		C - S/N <u>210271399</u>	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	1-9	D10		R8
1	6-9	D2	Jet Fuel 9 is not indicated on label	↓
2	10	D7	two dates indicated on label: 12/15/21 and 12/20/21	R1
<i>Ed/2/21</i>				

pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. *MS 12/22/21*

**NOTES/OBSERVATIONS:**

---

**LEGEND:**

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

**REVIEWS:**

Sample Labeling <u>Jocelyne Solis-Ramos</u>	SRF <u>[Signature]</u>	PM <u>MS</u>
Date <u>12/22/21</u>	Date <u>12/22/21</u>	Date <u>12/22/21</u>

## EUROFINS / 12-22-2021 / 9:15AM

Received one cooler / Client requested some vials and bottles to be split at the table / Samples were not logged as received. She took them off the cooler

Any discrepancy COC & available bottles will be noted in the SRF.



## 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

976378

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

SDG#: 21L253

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 976378

SDG : 21L253

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

A total of two(2) water samples were received on 12/22/21 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. VG39L11B - 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. VG39L11L/VG39L11C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG. Matrix spike sample was prepared and analyzed at a frequency required by the project. Gasoline was within MS QC limits in L251-01M/L251-01S. 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 : 976378
=====
SDG NO. : 21L253
Instrument ID : GCT039
=====

```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER		Extraction DateTime	Sample Data FN	Calibration Data FN	Notes
				Analysis DateTime	Prep. Batch				
MBLK1W	VG39L11B	1	NA	12/22/2112:36	12/22/2112:36	EL22005A	EL22003A	21VG39L11	Method Blank
LCS1W	VG39L11L	1	NA	12/22/2113:13	12/22/2113:13	EL22006A	EL22003A	21VG39L11	Lab Control Sample (LCS)
LCD1W	VG39L11C	1	NA	12/22/2113:49	12/22/2113:49	EL22007A	EL22003A	21VG39L11	LCS Duplicate
202112210216	L253-01	1	NA	12/22/2121:07	12/22/2121:07	EL22019A	EL22013A	21VG39L11	Field Sample
202112210217	L253-02	1	NA	12/22/2121:43	12/22/2121:43	EL22020A	EL22013A	21VG39L11	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: 12/20/21 09:53  
Project : 976378 Date Received: 12/22/21  
Batch No. : 21L253 Date Extracted: 12/22/21 21:07  
Sample ID : 202112210216 Date Analyzed: 12/22/21 21:07  
Lab Samp ID: L253-01 Dilution Factor: 1  
Lab File ID: EL22019A Matrix: WATER  
Ext Btch ID: 21VG39L11 % Moisture: NA  
Calib. Ref.: EL22013A Instrument ID: 39  
=====

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	0.0333	0.0400	83	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: 12/20/21 09:53
Project     : 976378                     Date Received: 12/22/21
Batch No.   : 21L253                     Date Extracted: 12/22/21 21:43
Sample ID   : 202112210217              Date Analyzed: 12/22/21 21:43
Lab Samp ID: L253-02                     Dilution Factor: 1
Lab File ID: EL22020A                    Matrix: WATER
Ext Btch ID: 21V639L11                   % Moisture: NA
Calib. Ref.: EL22013A                    Instrument ID: 39
=====

```

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	0.0341	0.0400	85	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: 12/22/21 12:36
Project     : 976378                     Date Received: 12/22/21
Batch No.   : 21L253                     Date Extracted: 12/22/21 12:36
Sample ID   : MBLK1W                     Date Analyzed: 12/22/21 12:36
Lab Samp ID: VG39L11B                    Dilution Factor: 1
Lab File ID: EL22005A                    Matrix: WATER
Ext Btch ID: 21VG39L11                   % Moisture: NA
Calib. Ref.: EL22003A                    Instrument ID: 39
=====

```

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	0.0325	0.0400	81	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 : 976378  
BATCH NO. : 21L253  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W         LCD1W
LAB SAMPLE ID : VG39L11B                         VG39L11L     VG39L11C
LAB FILE ID  : EL22005A                         EL22006A     EL22007A
DATE PREPARED : 12/22/21 12:36                 12/22/21 13:13 12/22/21 13:49
DATE ANALYZED : 12/22/21 12:36                 12/22/21 13:13 12/22/21 13:49
PREP BATCH   : 21VG39L11                       21VG39L11   21VG39L11
CALIBRATION REF: EL22003A                       EL22003A     EL22003A
  
```

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	0.445	89	0.500	0.481	96	8	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0418	105	0.0400	0.0439	110	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 : 976353  
BATCH NO. : 21L251  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202112210151                       202112210151MS  202112210151MSD
LAB SAMPLE ID : L251-01                          L251-01M       L251-01S
LAB FILE ID  : EL22010A                          EL22011A       EL22012A
DATE PREPARED : 12/22/21 15:39                   12/22/21 16:15  12/22/21 16:51
DATE ANALYZED : 12/22/21 15:39                   12/22/21 16:15  12/22/21 16:51
PREP BATCH   : 21VG39L11                         21VG39L11      21VG39L11
CALIBRATION REF: EL22003A                        EL22003A       EL22003A
  
```

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	0.469	94	0.500	0.478	96	2	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0427	107	0.0400	0.0437	109	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

976378

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 21L253

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 976378

SDG : 21L253

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 12/22/21 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

The sample was 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. DSL022WB - 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. DSL022WL/DSL022WC 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. Diesel was within MS QC limits in 21L253-01M/21L253-01S. 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

The sample was 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: 976378

SDG : 21L253

METHOD 3520C/8015B  
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 12/22/21 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

The sample was 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. DSL022WB - 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. J5L022WL/J5L022WC were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG. One(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 21L254-01M/21L254-01S. 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

The sample was 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: 976378

SDG : 21L253

### METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 12/22/21 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

#### Holding Time

The sample was 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. DSL022WB - 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. J8L022WL/J8L022WC were within LCS limits. Refer to LCS summary form for details.

#### Matrix QC Sample

No matrix QC sample was provided on this SDG.

#### 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

The sample was 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    : 976378
SDG NO.    : 21L253
Instrument ID : D5
=====

```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis Date/Time	Extraction Date/Time	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
	WATER								
MBLK1W	DSL022WB	1	NA	12/29/2114:27	12/27/2111:00	LL29009A	LL29003A	21DSL022W	Method Blank
LCS1W	DSL022WL	1	NA	12/29/2114:44	12/27/2111:00	LL29010A	LL29003A	21DSL022W	Lab Control Sample (LCS)
LCD1W	DSL022WC	1	NA	12/29/2115:02	12/27/2111:00	LL29011A	LL29003A	21DSL022W	LCS Duplicate
202112210216	L253-01	1	NA	12/29/2116:31	12/27/2111:00	LL29016A	LL29003A	21DSL022W	Field Sample
202112210216MS	L253-01M	1	NA	12/29/2116:49	12/27/2111:00	LL29017A	LL29003A	21DSL022W	Matrix Spike Sample (MS)
202112210216MSD	L253-01S	1	NA	12/29/2117:06	12/27/2111:00	LL29018A	LL29003A	21DSL022W	MS Duplicate (MSD)

```

FN      - Filename
% Moist - Percent Moisture

```



LAB CHRONICLE  
PETROLEUM HYDROCARBONS BY EXTRACTION

=====  
 Client : EUROFINS EATON ANALYTICAL  
 Project : 976378  
 SDG NO. : 21L253  
 Instrument ID : D5  
 =====

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis Date/Time	Extraction Date/Time	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
	WATER								
MBLK1W	DSL022WB	1	NA	12/29/2114:27	12/27/2111:00	LL29009A	LL29004A	21DSL022W	Method Blank
LCS1W	J5L022WL	1	NA	12/29/2115:20	12/27/2111:00	LL29012A	LL29004A	21DSL022W	Lab Control Sample (LCS)
LCD1W	J5L022WC	1	NA	12/29/2115:38	12/27/2111:00	LL29013A	LL29004A	21DSL022W	LCS Duplicate
202112210216	L253-01	1	NA	12/29/2116:31	12/27/2111:00	LL29016A	LL29004A	21DSL022W	Field Sample

FN - Filename  
 % Moist - Percent Moisture

LAB CHRONICLE  
 PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL  
 Project : 976378

SDG NO. : 21L253  
 Instrument ID : D5

=====

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Notes	
WATER									
MBLK1W	DSL022WB	1	NA	12/29/2114:27	12/27/2111:00	LL29009A	LL29005A	21DSL022W Method Blank	
LCS1W	J8L022WL	1	NA	12/29/2115:55	12/27/2111:00	LL29014A	LL29005A	21DSL022W Lab Control Sample (LCS)	
LCD1W	J8L022WC	1	NA	12/29/2116:13	12/27/2111:00	LL29015A	LL29005A	21DSL022W LCS Duplicate	
202112210216	L253-01	1	NA	12/29/2116:31	12/27/2111:00	LL29016A	LL29005A	21DSL022W Field Sample	

FN - Filename

% Moist - Percent Moisture

# SAMPLE RESULTS

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

=====  
Client : EUROFINS EATON ANALYTICAL Date Collected: 12/20/21 09:53  
Project : 976378 Date Received: 12/22/21  
Batch No. : 21L253 Date Extracted: 12/27/21 11:00  
Sample ID : 202112210216 Date Analyzed: 12/29/21 16:31  
Lab Samp ID: 21L253-01 Dilution Factor: 1  
Lab File ID: LL29016A Matrix: WATER  
Ext Btch ID: 21DSL022W % Moisture: NA  
Calib. Ref.: LL29003A Instrument ID: D5  
=====

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.448	0.510	88	60-130
Hexacosane	0.139	0.127	109	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 : HWang Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/20/21 09:53
Project     : 976378                      Date Received: 12/22/21
Batch No.   : 21L253                      Date Extracted: 12/27/21 11:00
Sample ID   : 202112210216               Date Analyzed: 12/29/21 16:31
Lab Samp ID: 21L253-01                   Dilution Factor: 1
Lab File ID: LL29016A                    Matrix: WATER
Ext Btch ID: 21DSL022W                   % Moisture: NA
Calib. Ref.: LL29004A                    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	0.448	0.510	88	60-130
Hexacosane	0.139	0.127	109	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 : HWang                         Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/20/21 09:53
Project     : 976378                     Date Received: 12/22/21
Batch No.   : 21L253                     Date Extracted: 12/27/21 11:00
Sample ID   : 202112210216               Date Analyzed: 12/29/21 16:31
Lab Samp ID: 21L253-01                   Dilution Factor: 1
Lab File ID: LL29016A                     Matrix: WATER
Ext Btch ID: 21DSL022W                    % Moisture: NA
Calib. Ref.: LL29005A                     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	0.448	0.510	88	60-130
Hexacosane	0.139	0.127	109	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 : HWang Analyzed by : SDeeso

# QC SUMMARIES

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/27/21 11:00
Project     : 976378                     Date Received: 12/27/21
Batch No.   : 21L253                     Date Extracted: 12/27/21 11:00
Sample ID   : MBLK1W                     Date Analyzed: 12/29/21 14:27
Lab Samp ID: DSL022WB                    Dilution Factor: 1
Lab File ID: LL29009A                    Matrix: WATER
Ext Btch ID: 21DSL022W                   % Moisture: NA
Calib. Ref.: LL29003A                    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	0.426	0.500	85	60-130
Hexacosane	0.124	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 : HWang Analyzed by : SDeeso



EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 976378  
BATCH NO. : 21L253  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W           LCD1W
LAB SAMPLE ID : DSLO22WB                         DSL022WL       DSL022WC
LAB FILE ID  : LL29009A                         LL29010A       LL29011A
DATE PREPARED : 12/27/21 11:00                 12/27/21 11:00 12/27/21 11:00
DATE ANALYZED : 12/29/21 14:27                 12/29/21 14:44 12/29/21 15:02
PREP BATCH   : 21DSL022W                       21DSL022W      21DSL022W
CALIBRATION REF: LL29003A                       LL29003A       LL29003A
  
```

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.50	2.42	97	2.50	2.45	98	1	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.473	95	0.500	0.456	91	60-130
Hexacosane	0.125	0.114	91	0.125	0.133	106	60-130

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

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/27/21 11:00
Project     : 976378                     Date Received: 12/27/21
Batch No.   : 21L253                     Date Extracted: 12/27/21 11:00
Sample ID   : MBLK1W                     Date Analyzed: 12/29/21 14:27
Lab Samp ID: DSL022WB                    Dilution Factor: 1
Lab File ID: LL29009A                    Matrix: WATER
Ext Btch ID: 21DSL022W                   % Moisture: NA
Calib. Ref.: LL29004A                    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	0.426	0.500	85	60-130
Hexacosane	0.124	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 : HWang Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 976378  
BATCH NO. : 21L253  
METHOD : 3520C/8015B

```
=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W           LCD1W
LAB SAMPLE ID : DSL022WB                         J5L022WL       J5L022WC
LAB FILE ID  : LL29009A                         LL29012A       LL29013A
DATE PREPARED : 12/27/21 11:00                 12/27/21 11:00 12/27/21 11:00
DATE ANALYZED : 12/29/21 14:27                 12/29/21 15:20 12/29/21 15:38
PREP BATCH   : 21DSL022W                       21DSL022W      21DSL022W
CALIBRATION REF: LL29004A                     LL29004A       LL29004A
```

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.50	2.27	91	2.50	2.31	92	2	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.484	97	0.500	0.496	99	60-130
Hexacosane	0.125	0.123	98	0.125	0.112	90	60-130

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

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 12/27/21 11:00
Project    : 976378                      Date Received: 12/27/21
Batch No.  : 21L253                      Date Extracted: 12/27/21 11:00
Sample ID  : MBLK1W                      Date Analyzed: 12/29/21 14:27
Lab Samp ID: DSL022WB                   Dilution Factor: 1
Lab File ID: LL29009A                   Matrix: WATER
Ext Btch ID: 21DSL022W                  % Moisture: NA
Calib. Ref.: LL29005A                   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	0.426	0.500	85	60-130
Hexacosane	0.124	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 : HWang Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 976378  
BATCH NO. : 21L253  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W           LCD1W
LAB SAMPLE ID : DSL022WB                         J8L022WL       J8L022WC
LAB FILE ID  : LL29009A                         LL29014A       LL29015A
DATE PREPARED : 12/27/21 11:00                 12/27/21 11:00 12/27/21 11:00
DATE ANALYZED : 12/29/21 14:27                 12/29/21 15:55 12/29/21 16:13
PREP BATCH   : 21DSL022W                       21DSL022W      21DSL022W
CALIBRATION REF: LL29005A                       LL29005A       LL29005A
  
```

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.50	2.45	98	2.50	2.53	101	3	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.496	99	0.500	0.503	101	60-130
Hexacosane	0.125	0.115	92	0.125	0.130	104	60-130

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 : 976378  
BATCH NO. : 21L253  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202112210216                       202112210216MSD
LAB SAMPLE ID : 21L253-01                         21L253-01S
LAB FILE ID  : LL29016A                          LL29017A
DATE PREPARED : 12/27/21 11:00                   12/27/21 11:00
DATE ANALYZED : 12/29/21 16:31                   12/29/21 17:06
PREP BATCH   : 21DSL022W                         21DSL022W
CALIBRATION REF: LL29003A                        LL29003A
=====
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.53	2.68	106	2.55	2.46	96	9	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.505	0.499	99	0.510	0.484	95	60-130
Hexacosane	0.126	0.128	101	0.127	0.125	98	60-130

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

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 976381  
BATCH NO. : 21L254  
METHOD : 3520C/8015B

```

=====
MATRIX : WATER % MOISTURE:NA
DILUTION FACTOR: 1 1 1
SAMPLE ID : 202112210220 202112210220MS 202112210220MSD
LAB SAMPLE ID : 21L254-01 21L254-01M 21L254-01S
LAB FILE ID : LL29019A LL29020A LL29021A
DATE PREPARED : 12/27/21 11:00 12/27/21 11:00 12/27/21 11:00
DATE ANALYZED : 12/29/21 17:24 12/29/21 17:42 12/29/21 17:59
PREP BATCH : 21DSL022W 21DSL022W 21DSL022W
CALIBRATION REF: LL29004A LL29004A LL29004A
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.53	2.58	102	2.53	2.76	109	7	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.505	0.452	90	0.505	0.487	96	60-130
Hexacosane	0.126	0.106	84	0.126	0.116	92	60-130

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

976378

METHOD SW8015C  
ALCOHOLS BY GC

SDG#: 21L253



CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 976378

SDG : 21L253

METHOD SW8015C  
ALCOHOLS BY GC

One(1) water sample was received on 12/22/21 to be analyzed for Alcohols by GC in accordance with Method SW8015C and project specific requirements.

Holding Time

The sample was 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. MEL009WB - 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. MEL009WL/MEL009WC 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. Ethanol was within MS QC limits in L253-01M/L253-01S. Refer to Matrix QC summary form for details.

Sample Analysis

The sample was 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  
ALCOHOLS BY GC

SDG NO. : 21L253  
Instrument ID : GCT050

Client : EUROFINS EATON ANALYTICAL  
Project : 976378

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
	WATER								
MBLK1W	MEL009WB	1	NA	12/22/2111:02	NA	TL22004A	TL22002A	MEL009W	Method Blank
LCS1W	MEL009WL	1	NA	12/22/2111:15	NA	TL22005A	TL22002A	MEL009W	Lab Control Sample (LCS)
LCD1W	MEL009WC	1	NA	12/22/2111:28	NA	TL22006A	TL22002A	MEL009W	LCS Duplicate
202112210216	L253-01	1	NA	12/22/2111:40	NA	TL22007A	TL22002A	MEL009W	Field Sample
202112210216MS	L253-01M	1	NA	12/22/2111:58	NA	TL22008A	TL22002A	MEL009W	Matrix Spike Sample (MS)
202112210216MSD	L253-01S	1	NA	12/22/2112:13	NA	TL22009A	TL22002A	MEL009W	MS Duplicate (MSD)

FN - Filename  
% Moist - Percent Moisture

# SAMPLE RESULTS

METHOD SW8015C  
ALCOHOLS BY GC

```
=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: 12/20/21
Project     : 976378                        Date Received: 12/22/21
Batch No.   : 21L253                        Date Extracted: NA
Sample ID   : 202112210216                 Date Analyzed: 12/22/21 11:40
Lab Samp ID: L253-01                       Dilution Factor: 1
Lab File ID: TL22007A                      Matrix          : WATER
Ext Btch ID: MEL009W                       % Moisture      : NA
Calib. Ref.: TL22002A                      Instrument ID   : GCT050
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANOL	ND	2000	500

RL : Reporting Limit

# QC SUMMARIES

METHOD SW8015C  
ALCOHOLS BY GC

```
=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: NA
Project     : 976378                        Date Received: NA
Batch No.   : 21L253                        Date Extracted: NA
Sample ID   : MBLK1W                        Date Analyzed: 12/22/21 11:02
Lab Samp ID: MEL009WB                       Dilution Factor: 1
Lab File ID: TL22004A                       Matrix          : WATER
Ext Btch ID: MEL009W                        % Moisture      : NA
Calib. Ref.: TL22002A                       Instrument ID   : GCT050
=====
```

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ETHANOL	ND	2000	500

RL : Reporting Limit

EMAX QUALITY CONTROL DATA  
LCS/LCD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL  
PROJECT: 976378  
BATCH NO.: 21L253  
METHOD: METHOD SW8015C

=====

MATRIX: WATER % MOISTURE: NA  
DILUTION FACTOR: 1 1 1  
SAMPLE ID: MBLK1W  
LAB SAMP ID: MEL009WB MEL009WL MEL009WC  
LAB FILE ID: TL22004A TL22005A TL22006A  
DATE EXTRACTED: NA NA NA DATE COLLECTED: NA  
DATE ANALYZED: 12/22/2111:02 12/22/2111:15 12/22/2111:28 DATE RECEIVED: NA  
PREP. BATCH: MEL009W MEL009W MEL009W  
CALIB. REF: TL22002A TL22002A TL22002A

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Ethanol	ND	10000	9140	91	10000	9100	91	0	60-130	30

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT: EUROFINS EATON ANALYTICAL  
PROJECT: 976378  
BATCH NO.: 21L253  
METHOD: METHOD SW8015C

=====

MATRIX: WATER % MOISTURE: NA  
DILUTION FACTOR: 1 1 1  
SAMPLE ID: 202112210216  
LAB SAMP ID: L253-01 L253-01M L253-01S  
LAB FILE ID: TL22007A TL22008A TL22009A  
DATE EXTRACTED: NA NA NA DATE COLLECTED: 12/20/21  
DATE ANALYZED: 12/22/2111:40 12/22/2111:58 12/22/2112:13 DATE RECEIVED: 12/22/21  
PREP. BATCH: MEL009W MEL009W MEL009W  
CALIB. REF: TL22002A TL22002A TL22002A

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	MS RSLT (ug/L)	MS % REC	SPIKE AMT (ug/L)	MSD RSLT (ug/L)	MSD % REC	RPD ( % )	QC LIMIT ( % )	MAX RPD ( % )
Ethanol	ND	10000	9120	91	10000	9330	93	2	60-130	30



December 28, 2021

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

Project Name: Folder # 976378 Job # 1000014  
 Physis Project ID: 1407003-211

Dear Debbie,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 12/21/2021. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was 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
Base/Neutral Extractable Compounds by EPA 625.1
Acid Extractable Compounds w/ PAHs by EPA 625.1
6-tert-Butyl-2,4-dimethylphenol by EPA 625.1
2,6-Di-tert-butylphenol by EPA 625.1
2,6-Di-tert-butyl-4-methylphenol by EPA 625.1
p-tert-Butylphenol 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  
 Folder # 976378 Job # 100014

PHYSIS Project ID: 1407003-211  
 Total Samples: 1

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
94704	202112210216	HALAWA WELL P2	12/20/202	9:53	Samplewater	Not Specified

## 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

## 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 MS<sub>1</sub>/MS<sub>2</sub>, BS<sub>1</sub>/BS<sub>2</sub>, LCS<sub>1</sub>/LCS<sub>2</sub>, LCM<sub>1</sub>/LCM<sub>2</sub>, CRM<sub>1</sub>/CRM<sub>2</sub>, surrogate spikes and/or replicate project sample analysis (R<sub>1</sub>/R<sub>2</sub>) 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.

**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.

## 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

# ANALYTICAL REPORT

TERRA  
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## Acid Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
<b>Sample ID: 94704-R1 202112210216 HALAWA WELL P2 Matrix: Samplewater</b>											
(2,4,6-Tribromophenol)	EPA 625.1	% Recovery	67	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	21-Dec-21
(d5-Phenol)	EPA 625.1	% Recovery	25	1			Total	O-35024		22-Dec-21	26-Dec-21
2,4,5-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2,4,6-Trichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2,4-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2,4-Dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
2,6-Dichlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2,6-Di-tert-butyl-4-methylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2,6-Di-tert-butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2-Chlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
2-Methyl-4,6-dinitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
2-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
2-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
3+4-Methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
4-Chloro-3-methylphenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
4-Nitrophenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
6-tert-butyl-2,4-dimethylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
Benzoic Acid	EPA 625.1	µg/L	4.34	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
Benzyl Alcohol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
Pentachlorophenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21
Phenol	EPA 625.1	µg/L	ND	1	0.1	0.2	Total	O-35024		22-Dec-21	26-Dec-21
p-tert-Butylphenol	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024		22-Dec-21	26-Dec-21



## Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
<b>Sample ID: 94704-R1</b>	<b>202112210216 HALAWA WELL P2</b>	<b>Matrix: Samplewater</b>	<b>Sampled: 20-Dec-21 9:53</b>								
(d4-1,4-Dichlorobenzene)	EPA 625.1	% Recovery	61	1			Total	O-35024	22-Dec-21	21-Dec-21	
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Dibenzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Disalicylidenepropanediamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total	O-35024	22-Dec-21	26-Dec-21	

## Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
<b>Sample ID: 94704-R1 202112210216 HALAWA WELL P2 Matrix: Samplewater</b>											
(d10-Acenaphthene)	EPA 625.1	% Recovery	88	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	21-Dec-21
(d10-Phenanthrene)	EPA 625.1	% Recovery	94	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
(d12-Chrysene)	EPA 625.1	% Recovery	92	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
(d12-Perylene)	EPA 625.1	% Recovery	97	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
(d8-Naphthalene)	EPA 625.1	% Recovery	78	1			Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
1-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
1-Methylphenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
2,3,5-Trimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
2,6-Dimethylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
2-Methylnaphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Acenaphthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Acenaphthylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benz[a]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benz[a]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benz[b]fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benz[e]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benzof[ghi]perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Benzok[fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Biphenyl	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Chrysene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Dibenz[a,h]anthracene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Dibenzo[a,l]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21
Dibenzothiophene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total	O-35024	20-Dec-21 9:53	22-Dec-21	26-Dec-21

## Polynuclear Aromatic Hydrocarbons

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Fluoranthene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Fluorene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Indeno[1,2,3-cd]pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Naphthalene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Perylene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Phenanthrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21
Pyrene	EPA 625.1	µg/L	ND	1	0.001	0.005	Total		O-35024	22-Dec-21	26-Dec-21

# QUALITY CONTROL REPORT

TERRA

AURA

ENVIRONMENTAL LABORATORIES, INC.

*Innovative Solutions for Nature*

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC
<b>Sample ID: 94703-B1 QAQC Procedural Blank</b>											
Method: EPA 625.1											
Batch ID: O-35024											
Prepared: 22-Dec-21											
Analyzed: 25-Dec-21											
(2,4,6-Tribromophenol)	Total	59	1			% Recovery	100	59	44 - 159%	PASS	
(d5-Phenol)	Total	87	1			% Recovery	100	87	20 - 121%	PASS	
2,4,5-Trichlorophenol	Total	ND	1	0.05	0.1	µg/L					
2,4,6-Trichlorophenol	Total	ND	1	0.05	0.1	µg/L					
2,4-Dichlorophenol	Total	ND	1	0.05	0.1	µg/L					
2,4-Dinitrophenol	Total	ND	1	0.1	0.2	µg/L					
2,6-Dichlorophenol	Total	ND	1	0.05	0.1	µg/L					
2,6-Di-tert-butyl-4-methylphenol	Total	ND	1	0.05	0.1	µg/L					
2,6-Di-tert-butylphenol	Total	ND	1	0.05	0.1	µg/L					
2-Chlorophenol	Total	ND	1	0.05	0.1	µg/L					
2-Methyl-4,6-dinitrophenol	Total	ND	1	0.1	0.2	µg/L					
2-Methylphenol	Total	ND	1	0.1	0.2	µg/L					
2-Nitrophenol	Total	ND	1	0.1	0.2	µg/L					
3+4-Methylphenol	Total	ND	1	0.1	0.2	µg/L					
4-Chloro-3-methylphenol	Total	ND	1	0.1	0.2	µg/L					
4-Nitrophenol	Total	ND	1	0.1	0.2	µg/L					
6-tert-butyl-2,4-dimethylphenol	Total	ND	1	0.05	0.1	µg/L					
Benzoic Acid	Total	ND	1	0.1	0.2	µg/L					
Benzyl Alcohol	Total	ND	1	0.1	0.2	µg/L					
Pentachlorophenol	Total	ND	1	0.05	0.1	µg/L					
Phenol	Total	ND	1	0.1	0.2	µg/L					
p-tert-Butylphenol	Total	ND	1	0.05	0.1	µg/L					

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC
Sample ID: 94703-BS1 QAQC Procedural Blank											
Matrix: BlankMatrix											
Method: EPA 625.1											
Batch ID: O-35024											
Prepared: 22-Dec-21											
Analyzed: 25-Dec-21											
(2,4,6-Tribromophenol)	Total	61	1			% Recovery	100	0	61	44 - 159%	PASS
(d5-Phenol)	Total	71	1			% Recovery	100	0	71	20 - 121%	PASS
2,4,5-Trichlorophenol	Total	0.917	1	0.05	0.1	µg/L	1	0	92	57 - 116%	PASS
2,4,6-Trichlorophenol	Total	0.982	1	0.05	0.1	µg/L	1	0	98	56 - 118%	PASS
2,4-Dichlorophenol	Total	0.855	1	0.05	0.1	µg/L	1	0	86	51 - 117%	PASS
2,4-Dinitrophenol	Total	0.847	1	0.1	0.2	µg/L	1	0	85	0 - 152%	PASS
2,6-Dichlorophenol	Total	0.443	1	0.05	0.1	µg/L	0.5	0	89	30 - 130%	PASS
2,6-Di-tert-butyl-4-methylphenol	Total	0.784	1	0.05	0.1	µg/L	1	0	78	50 - 150%	PASS
2,6-Di-tert-butylphenol	Total	0.848	1	0.05	0.1	µg/L	1	0	85	50 - 150%	PASS
2-Chlorophenol	Total	0.781	1	0.05	0.1	µg/L	1	0	78	41 - 110%	PASS
2-Methyl-4,6-dinitrophenol	Total	0.958	1	0.1	0.2	µg/L	1	0	96	0 - 141%	PASS
2-Methylphenol	Total	0.855	1	0.1	0.2	µg/L	1	0	86	40 - 117%	PASS
2-Nitrophenol	Total	1.01	1	0.1	0.2	µg/L	1	0	101	40 - 117%	PASS
3+4-Methylphenol	Total	0.84	1	0.1	0.2	µg/L	1	0	84	0 - 130%	PASS
4-Chloro-3-methylphenol	Total	0.893	1	0.1	0.2	µg/L	1	0	89	51 - 128%	PASS
4-Nitrophenol	Total	0.906	1	0.1	0.2	µg/L	1	0	91	10 - 164%	PASS
6-tert-butyl-2,4-dimethylphenol	Total	0.956	1	0.05	0.1	µg/L	1	0	96	50 - 150%	PASS
Benzoic Acid	Total	0.728	1	0.1	0.2	µg/L	1	0	73	2 - 145%	PASS
Benzyl Alcohol	Total	0.85	1	0.1	0.2	µg/L	1	0	85	43 - 148%	PASS
Pentachlorophenol	Total	1.03	1	0.05	0.1	µg/L	1	0	103	36 - 111%	PASS
Phenol	Total	0.763	1	0.1	0.2	µg/L	1	0	76	29 - 114%	PASS
p-tert-Butylphenol	Total	0.96	1	0.05	0.1	µg/L	1	0	96	50 - 150%	PASS

## Acid Extractable Compounds

## QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC	Matrix: BlankMatrix			
												Sampled:	Received:		
Method: EPA 625.1													Batch ID: O-35024	Prepared: 22-Dec-21	Analyzed: 25-Dec-21
(2,4,6-Tribromophenol)	Total	61	1			% Recovery	100	0	61	44 - 159%	PASS	0	30	PASS	
(d5-Phenol)	Total	70	1			% Recovery	100	0	70	20 - 121%	PASS	1	30	PASS	
2,4,5-Trichlorophenol	Total	0.925	1	0.05	0.1	µg/L	1	0	93	57 - 116%	PASS	0	30	PASS	
2,4,6-Trichlorophenol	Total	0.973	1	0.05	0.1	µg/L	1	0	97	56 - 118%	PASS	1	30	PASS	
2,4-Dichlorophenol	Total	0.844	1	0.05	0.1	µg/L	1	0	84	51 - 117%	PASS	2	30	PASS	
2,4-Dinitrophenol	Total	0.783	1	0.1	0.2	µg/L	1	0	78	0 - 152%	PASS	9	30	PASS	
2,6-Dichlorophenol	Total	0.444	1	0.05	0.1	µg/L	0.5	0	89	30 - 130%	PASS	0	30	PASS	
2,6-Di-tert-butyl-4-methylphenol	Total	0.701	1	0.05	0.1	µg/L	1	0	70	50 - 150%	PASS	11	30	PASS	
2,6-Di-tert-butylphenol	Total	0.812	1	0.05	0.1	µg/L	1	0	81	50 - 150%	PASS	5	30	PASS	
2-Chlorophenol	Total	0.792	1	0.05	0.1	µg/L	1	0	79	41 - 110%	PASS	1	30	PASS	
2-Methyl-4,6-dinitrophenol	Total	0.99	1	0.1	0.2	µg/L	1	0	99	0 - 141%	PASS	3	30	PASS	
2-Methylphenol	Total	0.842	1	0.1	0.2	µg/L	1	0	84	40 - 117%	PASS	2	30	PASS	
2-Nitrophenol	Total	0.987	1	0.1	0.2	µg/L	1	0	99	40 - 117%	PASS	2	30	PASS	
3+4-Methylphenol	Total	0.845	1	0.1	0.2	µg/L	1	0	85	0 - 130%	PASS	0	30	PASS	
4-Chloro-3-methylphenol	Total	0.88	1	0.1	0.2	µg/L	1	0	88	51 - 128%	PASS	1	30	PASS	
4-Nitrophenol	Total	0.924	1	0.1	0.2	µg/L	1	0	92	10 - 164%	PASS	1	30	PASS	
6-tert-butyl-2,4-dimethylphenol	Total	0.929	1	0.05	0.1	µg/L	1	0	93	50 - 150%	PASS	3	30	PASS	
Benzoic Acid	Total	0.921	1	0.1	0.2	µg/L	1	0	92	2 - 145%	PASS	23	30	PASS	
Benzyl Alcohol	Total	0.866	1	0.1	0.2	µg/L	1	0	87	43 - 148%	PASS	2	30	PASS	
Pentachlorophenol	Total	1.01	1	0.05	0.1	µg/L	1	0	101	36 - 111%	PASS	2	30	PASS	
Phenol	Total	0.755	1	0.1	0.2	µg/L	1	0	75	29 - 114%	PASS	0	30	PASS	
p-tert-Butylphenol	Total	0.937	1	0.05	0.1	µg/L	1	0	94	50 - 150%	PASS	2	30	PASS	

## Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC
Sample ID: 94703-B1 QAQC Procedural Blank Matrix: BlankMatrix											
Method: EPA 625.1 Batch ID: O-35024 Prepared: 22-Dec-21 Analyzed: 25-Dec-21											
% Recovery 100 85 30 - 130% PASS											
(d4-1,4-Dichlorobenzene)	Total	85	1				100				
2-Chloronaphthalene	Total	ND	1	0.05	0.1	µg/L					
2-Nitroaniline	Total	ND	1	0.05	0.1	µg/L					
3-Nitroaniline	Total	ND	1	0.05	0.1	µg/L					
4-Bromophenyl ether	Total	ND	1	0.05	0.1	µg/L					
4-Chloroaniline	Total	ND	1	0.05	0.1	µg/L					
4-Chlorophenyl ether	Total	ND	1	0.05	0.1	µg/L					
4-Nitroaniline	Total	ND	1	0.05	0.1	µg/L					
Aniline	Total	ND	1	0.05	0.1	µg/L					
Benzidine	Total	ND	1	0.05	0.1	µg/L					
Bis(2-Chloroethoxy) methane	Total	ND	1	0.05	0.1	µg/L					
Bis(2-Chloroethyl) ether	Total	ND	1	0.05	0.1	µg/L					
Bis(2-Chloroisopropyl) ether	Total	ND	1	0.05	0.1	µg/L					
Dibenzofuran	Total	ND	1	0.05	0.1	µg/L					
Disalicylidenepropanediamine	Total	ND	1	0.05	0.1	µg/L					
Hexachloroethane	Total	ND	1	0.05	0.1	µg/L					
Nitrobenzene	Total	ND	1	0.05	0.1	µg/L					
N-Nitrosodi-n-propylamine	Total	ND	1	0.05	0.1	µg/L					
N-Nitrosodiphenylamine	Total	ND	1	0.05	0.1	µg/L					



## Base/Neutral Extractable Compounds **QUALITY CONTROL REPORT**

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC
Sample ID: 94703-BS1 QAQC Procedural Blank											
Matrix: BlankMatrix											
Method: EPA 625.1											
Batch ID: O-35024											
Prepared: 22-Dec-21											
Analyzed: 25-Dec-21											
% Recovery											
(d4-1,4-Dichlorobenzene)	Total	76	1				100	0	76	30 - 130%	PASS
2-Chloronaphthalene	Total	0.919	1	0.05	0.1	µg/L	1	0	92	53 - 130%	PASS
2-Nitroaniline	Total	0.9	1	0.05	0.1	µg/L	1	0	90	69 - 114%	PASS
3-Nitroaniline	Total	0.565	1	0.05	0.1	µg/L	1	0	56	23 - 137%	PASS
4-Bromophenylphenyl ether	Total	0.999	1	0.05	0.1	µg/L	1	0	100	61 - 132%	PASS
4-Chloroaniline	Total	0.502	1	0.05	0.1	µg/L	1	0	50	50 - 150%	PASS
4-Chlorophenylphenyl ether	Total	0.975	1	0.05	0.1	µg/L	1	0	98	63 - 130%	PASS
4-Nitroaniline	Total	0.744	1	0.05	0.1	µg/L	1	0	74	10 - 159%	PASS
Aniline	Total	0.813	1	0.05	0.1	µg/L	1	0	81	50 - 150%	PASS
Benzidine	Total	0.827	1	0.05	0.1	µg/L	1	0	83	0 - 125%	PASS
Bis(2-Chloroethoxy) methane	Total	0.943	1	0.05	0.1	µg/L	1	0	94	66 - 122%	PASS
Bis(2-Chloroethyl) ether	Total	0.477	1	0.05	0.1	µg/L	1	0	48	43 - 127%	PASS
Bis(2-Chloroisopropyl) ether	Total	1.02	1	0.05	0.1	µg/L	1	0	102	49 - 128%	PASS
Dibenzofuran	Total	0.928	1	0.05	0.1	µg/L	1	0	93	50 - 150%	PASS
Disalicylidenepropanediamine	Total	36	1	0.05	0.1	µg/L	50	0	72	50 - 150%	PASS
Hexachloroethane	Total	0.824	1	0.05	0.1	µg/L	1	0	82	27 - 130%	PASS
Nitrobenzene	Total	0.826	1	0.05	0.1	µg/L	1	0	83	54 - 111%	PASS
N-Nitrosodi-n-propylamine	Total	1	1	0.05	0.1	µg/L	1	0	100	61 - 152%	PASS
N-Nitrosodiphenylamine	Total	0.892	1	0.05	0.1	µg/L	1	0	89	49 - 142%	PASS

## Base/Neutral Extractable Compounds **QUALITY CONTROL REPORT**

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC			
Sample ID: 94703-BS2 QAQC Procedural Blank														
		Method: EPA 625.1		Batch ID: O-35024		Prepared: 22-Dec-21		Analyzed: 25-Dec-21						
		Matrix: Blank		Matrix: Blank		Matrix: Blank		Matrix: Blank		Matrix: Blank				
(d4-1,4-Dichlorobenzene)	Total	76	1			% Recovery	100	0	76	30 - 130%	PASS	0	30	PASS
2-Chloronaphthalene	Total	0.913	1	0.05	0.1	µg/L	1	0	91	53 - 130%	PASS	1	30	PASS
2-Nitroaniline	Total	0.92	1	0.05	0.1	µg/L	1	0	92	69 - 114%	PASS	2	30	PASS
3-Nitroaniline	Total	0.624	1	0.05	0.1	µg/L	1	0	62	23 - 137%	PASS	10	30	PASS
4-Bromophenylphenyl ether	Total	0.994	1	0.05	0.1	µg/L	1	0	99	61 - 132%	PASS	1	30	PASS
4-Chloroaniline	Total	0.519	1	0.05	0.1	µg/L	1	0	52	50 - 150%	PASS	4	30	PASS
4-Chlorophenylphenyl ether	Total	0.949	1	0.05	0.1	µg/L	1	0	95	63 - 130%	PASS	3	30	PASS
4-Nitroaniline	Total	0.744	1	0.05	0.1	µg/L	1	0	74	10 - 159%	PASS	0	30	PASS
Aniline	Total	0.766	1	0.05	0.1	µg/L	1	0	77	50 - 150%	PASS	5	30	PASS
Benzidine	Total	0.941	1	0.05	0.1	µg/L	1	0	94	0 - 125%	PASS	12	30	PASS
Bis(2-Chloroethoxy) methane	Total	0.915	1	0.05	0.1	µg/L	1	0	92	66 - 122%	PASS	2	30	PASS
Bis(2-Chloroethyl) ether	Total	0.44	1	0.05	0.1	µg/L	1	0	44	43 - 127%	PASS	9	30	PASS
Bis(2-Chloroisopropyl) ether	Total	0.942	1	0.05	0.1	µg/L	1	0	94	49 - 128%	PASS	8	30	PASS
Dibenzofuran	Total	0.923	1	0.05	0.1	µg/L	1	0	92	50 - 150%	PASS	1	30	PASS
Disalicylidenepropanediamine	Total	39.5	1	0.05	0.1	µg/L	50	0	79	50 - 150%	PASS	9	30	PASS
Hexachloroethane	Total	0.821	1	0.05	0.1	µg/L	1	0	82	27 - 130%	PASS	0	30	PASS
Nitrobenzene	Total	0.826	1	0.05	0.1	µg/L	1	0	83	54 - 111%	PASS	0	30	PASS
N-Nitrosodi-n-propylamine	Total	0.979	1	0.05	0.1	µg/L	1	0	98	61 - 152%	PASS	3	30	PASS
N-Nitrosodiphenylamine	Total	0.895	1	0.05	0.1	µg/L	1	0	89	49 - 142%	PASS	1	30	PASS



## Polynuclear Aromatic Hydrocarbons

## QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC
Dibenzothiophene	Total	ND	1	0.001	0.005	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 LIMITS	PRECISION %	QA CODEC
Sample ID: 94703-BS1 QAQC Procedural Blank Matrix: BlankMatrix											
Method: EPA 625.1 Batch ID: O-35024 Prepared: 22-Dec-21 Analyzed: 25-Dec-21											
(d10-Acenaphthene)	Total	86	1			% Recovery	100	0	86	65 - 113%	PASS
(d10-Phenanthrene)	Total	96	1			% Recovery	100	0	96	80 - 111%	PASS
(d12-Chrysene)	Total	104	1			% Recovery	100	0	104	60 - 139%	PASS
(d12-Perylene)	Total	92	1			% Recovery	100	0	92	36 - 161%	PASS
(d8-Naphthalene)	Total	77	1			% Recovery	100	0	77	44 - 119%	PASS
1-Methylnaphthalene	Total	0.435	1	0.001		µg/L	0.5	0	87	49 - 117%	PASS
1-Methylphenanthrene	Total	0.516	1	0.001		µg/L	0.5	0	103	66 - 127%	PASS
2,3,5-Trimethylnaphthalene	Total	0.474	1	0.001		µg/L	0.5	0	95	57 - 120%	PASS
2,6-Dimethylnaphthalene	Total	0.452	1	0.001		µg/L	0.5	0	90	54 - 117%	PASS
2-Methylnaphthalene	Total	1.32	1	0.001		µg/L	1.5	0	88	47 - 130%	PASS
Acenaphthene	Total	1.33	1	0.001		µg/L	1.5	0	89	53 - 131%	PASS
Acenaphthylene	Total	1.4	1	0.001		µg/L	1.5	0	93	43 - 140%	PASS
Anthracene	Total	1.46	1	0.001		µg/L	1.5	0	97	58 - 135%	PASS
Benz[a]anthracene	Total	1.79	1	0.001		µg/L	1.5	0	119	55 - 145%	PASS
Benzof[a]pyrene	Total	1.54	1	0.001		µg/L	1.5	0	103	51 - 143%	PASS
Benzof[b]fluoranthene	Total	1.85	1	0.001		µg/L	1.5	0	123	46 - 165%	PASS
Benzof[e]pyrene	Total	0.516	1	0.001		µg/L	0.5	0	103	42 - 152%	PASS
Benzof[g,h,i]perylene	Total	1.55	1	0.001		µg/L	1.5	0	103	63 - 133%	PASS
Benzof[k]fluoranthene	Total	1.62	1	0.001		µg/L	1.5	0	108	56 - 145%	PASS
Biphenyl	Total	0.45	1	0.001		µg/L	0.5	0	90	56 - 119%	PASS
Chrysene	Total	1.67	1	0.001		µg/L	1.5	0	111	56 - 141%	PASS
Dibenz[a,h]anthracene	Total	1.8	1	0.001		µg/L	1.5	0	120	55 - 150%	PASS
Dibenzof[a,l]pyrene	Total	0.358	1	0.001		µg/L	0.5	0	72	50 - 150%	PASS

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	PRECISION %	QA CODEC
									LIMITS	LIMITS	
Dibenzothiophene	Total	0.504	1	0.001	0.005	µg/L	0.5	0	101	75 - 113%	PASS
Fluoranthene	Total	1.64	1	0.001	0.005	µg/L	1.5	0	109	60 - 146%	PASS
Fluorene	Total	1.5	1	0.001	0.005	µg/L	1.5	0	100	58 - 131%	PASS
Indeno[1,2,3-cd]pyrene	Total	1.9	1	0.001	0.005	µg/L	1.5	0	127	50 - 151%	PASS
Naphthalene	Total	1.19	1	0.001	0.005	µg/L	1.5	0	79	41 - 126%	PASS
Perylene	Total	0.486	1	0.001	0.005	µg/L	0.5	0	97	48 - 141%	PASS
Phenanthrene	Total	1.49	1	0.001	0.005	µg/L	1.5	0	99	67 - 127%	PASS
Pyrene	Total	1.65	1	0.001	0.005	µg/L	1.5	0	110	54 - 156%	PASS

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY LIMITS	PRECISION %	QA CODEC			
Matrix: BlankMatrix														
Sample ID: 94703-BS2 QAQC Procedural Blank														
Method: EPA 625.1														
Batch ID: O-35024														
Prepared: 22-Dec-21														
Analyzed: 25-Dec-21														
(d10-Acenaphthene)	Total	83	1			% Recovery	100	0	83	65 - 113%	PASS	4	30	PASS
(d10-Phenanthrene)	Total	95	1			% Recovery	100	0	95	80 - 111%	PASS	1	30	PASS
(d12-Chrysene)	Total	97	1			% Recovery	100	0	97	60 - 139%	PASS	7	30	PASS
(d12-Perylene)	Total	92	1			% Recovery	100	0	92	36 - 161%	PASS	0	30	PASS
(d8-Naphthalene)	Total	76	1			% Recovery	100	0	76	44 - 119%	PASS	1	30	PASS
1-Methylnaphthalene	Total	0.426	1	0.001	0.005	µg/L	0.5	0	85	49 - 117%	PASS	2	30	PASS
1-Methylphenanthrene	Total	0.518	1	0.001	0.005	µg/L	0.5	0	104	66 - 127%	PASS	1	30	PASS
2,3,5-Trimethylnaphthalene	Total	0.462	1	0.001	0.005	µg/L	0.5	0	92	57 - 120%	PASS	3	30	PASS
2,6-Dimethylnaphthalene	Total	0.439	1	0.001	0.005	µg/L	0.5	0	88	54 - 117%	PASS	2	30	PASS
2-Methylnaphthalene	Total	1.29	1	0.001	0.005	µg/L	1.5	0	86	47 - 130%	PASS	2	30	PASS
Acenaphthene	Total	1.31	1	0.001	0.005	µg/L	1.5	0	87	53 - 131%	PASS	2	30	PASS
Acenaphthylene	Total	1.38	1	0.001	0.005	µg/L	1.5	0	92	43 - 140%	PASS	1	30	PASS
Anthracene	Total	1.47	1	0.001	0.005	µg/L	1.5	0	98	58 - 135%	PASS	1	30	PASS
Benz[a]anthracene	Total	1.8	1	0.001	0.005	µg/L	1.5	0	120	55 - 145%	PASS	1	30	PASS
Benzofluoranthene	Total	1.53	1	0.001	0.005	µg/L	1.5	0	102	51 - 143%	PASS	1	30	PASS
Benzofluoranthene	Total	1.86	1	0.001	0.005	µg/L	1.5	0	124	46 - 165%	PASS	1	30	PASS
Benzofluoranthene	Total	0.514	1	0.001	0.005	µg/L	0.5	0	103	42 - 152%	PASS	0	30	PASS
Benzofluoranthene	Total	1.55	1	0.001	0.005	µg/L	1.5	0	103	63 - 133%	PASS	0	30	PASS
Benzofluoranthene	Total	1.6	1	0.001	0.005	µg/L	1.5	0	107	56 - 145%	PASS	1	30	PASS
Biphenyl	Total	0.44	1	0.001	0.005	µg/L	0.5	0	88	56 - 119%	PASS	2	30	PASS
Chrysene	Total	1.68	1	0.001	0.005	µg/L	1.5	0	112	56 - 141%	PASS	1	30	PASS
Dibenz[a,h]anthracene	Total	1.7	1	0.001	0.005	µg/L	1.5	0	113	55 - 150%	PASS	6	30	PASS
Dibenzofluoranthene	Total	0.372	1	0.001	0.005	µg/L	0.5	0	74	50 - 150%	PASS	3	30	PASS

## Polynuclear Aromatic Hydrocarbons QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY		PRECISION		QA CODEC	
									%	LIMITS	%	LIMITS		
Dibenzothiophene	Total	0.503	1	0.001	0.005	µg/L	0.5	0	101	75 - 113%	PASS	0	30	PASS
Fluoranthene	Total	1.64	1	0.001	0.005	µg/L	1.5	0	109	60 - 146%	PASS	0	30	PASS
Fluorene	Total	1.47	1	0.001	0.005	µg/L	1.5	0	98	58 - 131%	PASS	2	30	PASS
Indeno[1,2,3-cd]pyrene	Total	1.88	1	0.001	0.005	µg/L	1.5	0	125	50 - 151%	PASS	2	30	PASS
Naphthalene	Total	1.18	1	0.001	0.005	µg/L	1.5	0	79	41 - 126%	PASS	0	30	PASS
Perylene	Total	0.485	1	0.001	0.005	µg/L	0.5	0	97	48 - 141%	PASS	0	30	PASS
Phenanthrene	Total	1.48	1	0.001	0.005	µg/L	1.5	0	99	67 - 127%	PASS	0	30	PASS
Pyrene	Total	1.64	1	0.001	0.005	µg/L	1.5	0	109	54 - 156%	PASS	1	30	PASS



# PHYSICAL Total Ion Chromatogram SIS

TERRA

FAUNA

FLORA

AQUA

AURA

ENVIRONMENTAL ANALYTICAL SERVICES, INC.

**REPORT**  
*Innovative Solutions for a Sustainable Future*

Sample ID: 94704

RT	Area Pct	Concentration (ng/L)	Library/ID	Qual	Cas Number
35.1097	3.8637	1111	Anthracene-D10-	1719-06-8	96
10.3431	3.7714	1085	Cyclohexane, 1-methyl-2-propyl-	4291-79-6	92
10.2844	1.9923	573	Octane, 3-methyl-6-methylene-	74630-07-2	85
44.5167	1.8477	531	Cyclic octaatomic sulfur	10544-50-0	93
10.5304	1.2545	361	Oxalic acid, cyclohexyl ethyl ester	1000309-30-2	90
10.1056	0.9996	287	2,3,3-Trimethyl-1-hexene	1000113-52-1	89
10.1726	0.6333	182	Hydroperoxide, 1-ethylbutyl	24254-56-6	86
62.7415	0.5481	158	Octacosane	630-02-4	95
10.5274	0.4941	142	Cyclopentanol, 1-methyl-	1462-03-9	87
10.0774	0.4815	138	1H-Tetrazole	288-94-8	87
59.7471	0.4698	135	Pentacosane	629-99-2	96
39.9962	0.4637	133	7,9-Di-tert-butyl-1-oxaspiro(4,5)deca-6,9-diene-2,8-dione	82304-66-3	90
45.5764	0.4261	123	Terephthalic acid, isobutyl butyl ester	1000323-56-2	95
10.3981	0.4165	120	Octane, 3-methyl-6-methylene-	74630-07-2	86
10.2279	0.3964	114	Sulfurous acid, di(cyclohexylmethyl) ester	1010309-22-7	84
65.6355	0.3753	108	Pentacosane	629-99-2	93
27.4783	0.3697	106	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate	6846-50-0	98

Concentration estimated using the response for Anthracene-d10

**Sample ID: Lab Blank B1\_35024**

RT	Area Pct	Concentration (ng/L)	Library/ID	Qual	Cas Number
35.1159	4.3876	1111	Anthracene-D10-	1719-06-8	96
10.3435	6.0893	1542	Cyclohexane, 1-methyl-2-propyl-	4291-79-6	92
10.2843	3.1069	787	Octane, 3-methyl-6-methylene-	74630-07-2	85
10.5310	1.5778	400	1,5-Heptadien-4-one, 3,3,6-trimethyl-	546-49-6	91
10.1054	1.4624	370	2,3,3-Trimethyl-1-hexene	1000113-52-1	88
10.1731	0.8169	207	Hydroperoxide, 1-ethylbutyl	24254-56-6	86
10.0780	0.7711	195	1H-Tetrazole	288-94-8	86
10.2268	0.7315	185	Sulfurous acid, di(cyclohexylmethyl) ester	1010309-22-7	81

Concentration estimated using the response for Anthracene-d10

# PERFORMANCE CHAIN OF CUSTODY

TERRA ENVIRONMENTAL LABORATORIES, INC. AURA

*Innovative Solutions for Nature*



Eaton Analytical

Ship To:
Physis Environmental Laboratories, Inc
1904 East Wright Circle
Anaheim, CA 92806-6028
Phone: 714-602-5320 Fax:

Folder #: 976378 Report Due: 12/28/2021

Sample ID: 202112210216

Client Sample ID for reference on: HALAWA WELL P2

Sample type: Sample Event: Analysis Requested

Table with 3 columns: Method (EPA 625), Prep Method (EPA 625), Analysis Requested (625 Acid Extractable in ug/L, 625 Base Neutral Extractable in ug/L, 625PAH in ug/L)

Facility ID:

Sample Point ID:

Sample Date & Time Matrix: 12/20/21 0953 DW

PWSID

JLS

Static ID:

rush

Provide in each Report the Specified State Certification # and Exp Date for requested tests + matrix. Samples from: HAWAII

Reports: Jackie Contreras Sub-Contracting Administrator
EMAIL TO: Eaton-MonroviaSubContract@eurofinset.com
Eurofins Eaton Analytical, LLC 750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016
Phone (626) 386-1165 Fax (626) 386-1122
Invoices to: Eurofins Eaton Analytical, LLC
Accounts Payable 2425 New Holland Pike, Lancaster, PA 17605

Date: 12/21/2021

Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 976378 Job# 1000014

Report all quality control data according to Method. Include dates analyzed. Date extracted (if extracted) and Method reference on the report. Results must have Complete data & QC with Approval Signature

Relinquished by: [Signature] Date: 12/21/21 Time: 14:51
Received by: [Signature] Date: 12/21/21 Time: 17:10
Relinquished by: [Signature] Date: Time:
Received by: [Signature] Date: Time:

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Project Iteration ID: 1407003-211  
 Client Name: Eurofins Eaton Analytical  
 Project Name: Folder # 976378 Job # 1000014  
 COC Page Number: 2 of 2  
 Bottle Label Color: NA

## Sample Receipt Summary

### Receiving Info

1. Initials Received By: DA
2. Date Received: 12/11/21
3. Time Received: 1710
4. Client Name: Eurofins
5. Courier Information: (Please circle)
  - Client
  - UPS
  - Area Fast
  - DRS
  - FedEx
  - GSO/GLS
  - Ontrac
  - PAMS
  - PHYSIS Driver:
  - i. Start Time: \_\_\_\_\_
  - ii. End Time: \_\_\_\_\_
  - iii. Total Mileage: \_\_\_\_\_
  - iv. Number of Pickups: \_\_\_\_\_
6. Container Information: (Please put the # of containers or circle none)
  - 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): 32  
 Used I/R Thermometer # 1-2

### Inspection Info

1. Initials Inspected By: DA

### 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: