

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

Date of Issue  
05/23/2022

*Rinda Seddas*  
EUROFINS EATON  
ANALYTICAL, LLC



Utah ELCP CA00006

DEB: Debbie L Frank  
Project Manager

Report: 994824  
Project: RED-HILL  
Group: Weekly TPH-8015\_RED-HILL (2022) - EMAX

\* 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 17025:2017 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
Enterococci	Enterolert	x	x
Escherichia coli (Enumeration)	SM 9221 B.1 SM 9221 F	x	
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x
Heterotrophic Bacteria	SM 9215 B	x	
Legionella	Legiolert®	x	
Pseudomonas aeruginosa	Idexx Pseudalart	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x	
Total Microcystins and Nodularins	EPA 546	X	
Yeast and Mold	SM 9610	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x	
1,4-Dioxane	EPA 522	x	
2,3,7,8-TCDD	Modified EPA 1613 B	x	
Acrylamide	+ LCMS 2440)	x	
Algal Toxins/Microcys in	+ LCMS 3570	x	
Alkalinity	SM 2320B	x	x
Ammonia	EPA 350.1, SM 4500-NH3 H		x
Asbestos	EPA 100.2	x	x
Bicarbonate Alkalinity as HCO3	SM 2330 B	x	x
BOD/CBOD	SM 5210 B		x
Bromate	+ LCMS- 2447	x	
Carbonate as CO3	SM 2330 B	x	x
Carbonyls	EPA 556	x	x
Chemical Oxygen Demand	EPA 410.4, SM 5220D		x
Chlorinated Acids	EPA 515.4	x	
Chlorine Dioxide	Palin Test Chlordio X Plus, SM 4500-CLO2 D	x	
Chlorine, Free, Combined, Total Residual, Chloramines	SM 4500-Cl G	x	
Color	SM2120B	x	
Conductivity	EPA 120.1, SM 2510B	x	x
Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated	SM 2330 B	x	
Cyanide (Amenable)	SM 4500-CN G	x	x
Cyanide (Free)	SM 4500CN F	x	x
Cyanide (Total)	EPA 335.4	x	x
Cyanogen Chloride (Screen)	+ 335 Mod (WC-24467)	x	
Diquat and Paraquat	EPA 549.2	x	
DBP and HAA	SM 6251 B	x	
Dissolved Organic Carbon	SM 5310 C	x	
Dissolved Oxygen	SM 4500-O G		x
EDB/DCBP/TCP	EPA 504.1	x	
EDB/DBCP and Disinfection Byproducts	EPA 551.1	x	
EDTA and NTA	+ WC-2454	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

Test(s)	Method(s)	Potable Water *	Waste Water
Gross Alpha coprecipitation	SM 7110 C	x	x
Hardness	SM 2340 B	x	x
Hexavalent Chromium	EPA 218.6,	x	x
Hexavalent Chromium	EPA 218.7,	x	
Hexavalent Chromium	SM 3500-Cr B		x
Inorganic Anions and DBPs	EPA 300.0	x	x
Norganic Anions and DBPs	EPA 300.1	x	
Kjeldahl Nitrogen	EPA 351.2		x
Metals	EPA 200.7, EPA200.8	x	x
Nitrosamines	EEA-Agilent 521.1 (GCMS-24250)	x	
Nitrate/Nitrite Nitrogen	EPA 353.2	x	x
Odor	SM2150B	x	
Organohalide Pesticides and PCB	EPA 505	x	
Ortho Phosphate	SM 4500P E	x	
Oxyhalides Disinfect ion Byproducts	EPA 317.0	x	
Perchlorate	EPA 331.0	x	
Perchlorate (Low and High Levels)	EPA 314.0	x	
Perfluorinated Alkyl Acids	EPA 533, EPA 537, EPA 537.1	x	
PPCP and EDC	+ LCMS-2443	x	
pH	EPA 150.1 SM 4500-H+ B	x	x
Phenolics – Low Level	+WC 2493 (EPA 420.2 and EPA 420.4 MOD)	x	x
Phenylurea Pesticides/Herbicides	+ LCMS-2448	x	
Radium-226, Radium-228	GA Tech (Rad-2374)	x	
Radon-222	SM 7500RN	x	
Residue (Filterable)	SM 2540C	x	x
Residue (Non-Filterable)	SM 2540D		x
Residue (Total)	SM 2540B		x
Residue (Volatile)	EPA 160.4		x
Semi-Volatile Compounds	EPA 525.2	x	
Silica	SM 4500-SiO2 C	x	x
Sulfide	SM 4500-S D		x
Sulfite	SM 4500-SO3 B	x	x
Surfactants	SM 5540C	x	x
Taste and Odor	SM 6040 E	x	
Total Organic Carbon	SM 5310 C	x	x
Total Phenols	EPA 420.1		x
Total Phenols	EPA 420.4	x	x
Triazine Pesticides and their Degradates	+ LCMS-3617	x	
Turbidity	EPA 180.1	x	x
Uranium by ICP/MS	EPA 200.8	x	
UV 254 Organic Constituents	SM 5910B	x	
VOCs	EPA 524.2	x	
VOCs	+(GCMS 2412) by EPA 524.2 modified	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 #: 994824  
Project: RED-HILL  
Sample Group: Weekly TPH-8015\_RED-HILL (2022)  
- EMAX  
Project Manager: Debbie L Frank  
Phone: (626) 386-1149  
PO #: C20525101 exp 05312023

The following samples were received from you on **March 24, 2022** at 1237. 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
<u>202203240059</u>	AIEA GULCH WELLS P1 (331-201-TP071)	03/22/2022 1058
	(SUB)Gas Fraction Hydrocarbons      TPH 8015 Diesel and Motor Oil	
<u>202203240060</u>	AIEA GULCH WELLS P2 (331-202-TP072)	03/22/2022 1121
	(UB)Gas Fraction Hydrocarbons      TPH 8015 Diesel and Motor Oil	
<u>202203240061</u>	TRAVEL BLANK	03/22/2022 1058
	(SUB)Gas Fraction Hydrocarbons	

**Test Description**



Eaton Analytical

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

# CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: \_\_\_\_\_ SAMPLES CHECKED AGAINST COC BY: SR  
 SAMPLES LOGGED IN BY: SM  
 SAMPLE TEMP RECEIVED AT: \_\_\_\_\_ SAMPLES REC'D DAY OF COLLECTION?  (check for yes)  
 Colton / No. California / Arizona °C ( Compliance: 4 ± 2 °C )  
 Monrovia °C ( Compliance: 4 ± 2 °C )  
 CONDITION OF BLUE ICE: Frozen \_\_\_\_\_ Thawed \_\_\_\_\_ No Ice \_\_\_\_\_  
 Partially Frozen \_\_\_\_\_ Wet Ice \_\_\_\_\_  
 METHOD OF SHIPMENT: Pick-Up / Walk-In / **FedEx** / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:		PROJECT CODE:		COMPLIANCE SAMPLES		NON-COMPLIANCE SAMPLES		(check for yes)	
BWS HONOLULU		RED HILL		Requires state forms <input type="checkbox"/>		REGULATION INVOLVED:		(check for yes)	
EEA CLIENT CODE:		SAMPLE GROUP:		Type of samples (circle one):		ROUTINE SPECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA...)			
TAT requested: rush by adv notice only		STD ___ 1 wk ___ X ___ 3 day ___ 2 day ___ 1 day ___		SEE ATTACHED BOTTLE ORDER FOR ANALYSES		SEE ATTACHED BOTTLE ORDER FOR ANALYSES		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	SAMPLER COMMENTS		Temp Blank: _____ °C
03/22/22	1058	Aiea Gulch Wells Pump 1	H10000331-201	CFW			X		
03/22/22	1121	Aiea Gulch Wells Pump 2	H10000331-202	CFW			X		

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

SAMPLED BY:	PRINT NAME	COMPANY/TITLE	DATE	TIME
[Redacted Signature]	Lew Bailey	Honolulu Board of Water Supply	March 22, 2022	
RELINQUISHED BY:	Lew Bailey	Honolulu Board of Water Supply	23 March 2022	
RECEIVED BY:	G. PETERNER	EEA	03/24/2022	12:37
RELINQUISHED BY:				
RECEIVED BY:				

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

Created Date & Time: 12/27/2021 12:07:03AM

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

**Client ID:** HONOLULU  
**Project Code:** RED-HILL Bottle Orders  
**Group Name:** Red-Hill Expanded List (Albuquerque+)  
**PO#JOB#:** C20525101 exp 05312023  
**Description:** MOANALUA WELLS - Every 1 wee

**Kit #:** 308698  
**Created By:** - [AutoGenerated]  
**Deliver By:** 01/26/2022  
**STC:** Bottle Orders  
**Ice Type:** G  
 Pre Registered

**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	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel B_C	9	
1	8015 Gas_C	3	
1	8015 Gas C TB	2	
1	8015 Gas C TB	3	UN1789
<b>Sum Tests: 4</b>		<b>Sum Bottles: 17</b>	

**Comments**

**SITE ID:**  
**SAMPLER:** Eight 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Nine 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES. THIS IS A MSMSD SITE for 600 and 8000 series testing  
**SHIPPING:** Travel Blanks - TBA/MTBE, VOASDWA - Prepare TBs in the VOALAB. Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Content 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

# INTERNAL CHAIN OF CUSTODY RECORD

BEA Folder Number: 994824

**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 = 649A (Observation = 5.3 °C) (Corr. Factor = -0.3 °C) (Final = 5.0 °C)

TYPE OF ICE: Real  Synthetic  No 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:  Samples with Headspace (see below):

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)  
 Exempt from headspace concerns: Methods 515.4, HAA-(6251,552), 505, SPME, @CH, 532LCMS, 556, 536, Anastoxin, LCMS methods using 40 ml vials, International clients:

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

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

RECEIVED BY: <u>[Signature]</u>	PRINT NAME: <u>G. PEINER</u>	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: <u>03-27-2022</u>	TIME: <u>12:37</u>
SAMPLES CHECKED AGAINST COC BY: <u>[Signature]</u>	PRINT NAME: _____	COMPANY/TITLE: <u>Eurofins Eaton Analytical</u>	DATE: _____	TIME: _____

# INTERNAL CHAIN OF CUSTODY RECORD

ECA Folder Number:

SAMPLE TEMP RECEIVED:

Note: If samples are out of temperature ranges, let the ASMs know. ASMs will determine whether to proceed with analysis or not.  
SAMPLES RECD DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation = 5.8 °C) (Corr. Factor -0.3 °C) (Final = 5.5 °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: Sansate, Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

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

Headspace Documentation (use additional VOC and Radon Internal COFC for additional bottles)  
Exempt from headspace concerns: Methods 815.4, HAA(625.1,552), 505, SPME, @CH, 532.CMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

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

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

RECEIVED BY: <u>APX</u>	SIGNATURE	PRINT NAME: <u>G. PATTNER</u>	COMPANY/TITLE: Eurofins Eaton Analytical	DATE: <u>03-24-2022</u>	TIME: <u>12:37</u>
SAMPLES CHECKED AGAINST COC BY: _____	SIGNATURE	PRINT NAME: _____	COMPANY/TITLE: Eurofins Eaton Analytical	DATE: _____	TIME: _____



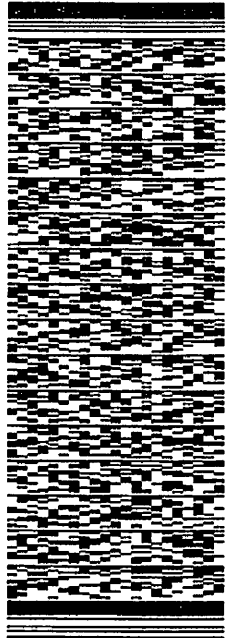
ORIGIN ID:HIKA (808) 748-5840  
 BMS CHEM LAB  
 HONOLULU BOARD OF WATER SUPPLY  
 630 S. BERETANIA ST.  
 CHEMICAL LABORATORY  
 HONOLULU, HI 96843  
 UNITED STATES US

SHIP DATE: 23MAR22  
 ACTWGT: 57.00 LB  
 CAD: 100205419/NET/4460  
 BILL RECEIPT

TO

**EUROFINS EATON ANALYTICAL, INC**  
**750 ROYAL OAKS DR**  
**SUITE 100**  
**MONROVIA CA 91016**  
 (626) 386-1178 REF:  
 NY

FO. DEPT.



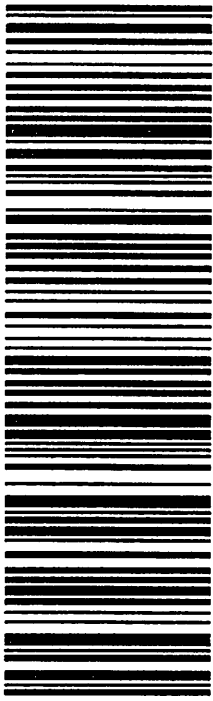
56DJ5/EB02/FE4A

1 of 2

TRK# 7763 7951 3227  
 0201  
 ## MASTER ##

THU - 24 MAR 10:30A  
 PRIORITY OVERNIGHT

**WZ WHPA**  
 CAUS BUR 91016



**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 Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

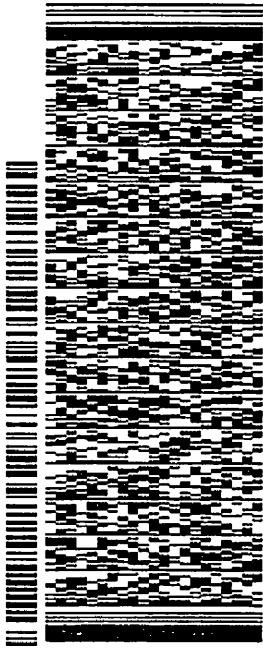
ORIGIN ID:HIKA (808) 748-5840  
BWS CHEMLAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S. BERETANIA ST.  
CHEMICAL LABORATORY  
HONOLULU, HI 96843  
UNITED STATES US

SHIP DATE: 23MAR22  
ACTWGT: 57.00 LB  
CAD: 100205419/MNET4460

TO

**EUROFINS EATON ANALYTICAL, INC**  
**750 ROYAL OAKS DR**  
**SUITE 100**  
**MONROVIA CA 91016**  
(626) 386-1178 REF.  
PO. DEPT.

56DJ5/EBO2/FE4A



THU - 24 MAR 10:30A  
PRIORITY OVERNIGHT

2 of 2  
MPS# 7763 7951 4337  
0263  
Mstr# 7763 7951 3227  
0201

**WZ WHPA** **91016**  
CA-US **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. 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 Service Guide. 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)

**Laboratory Comments**

**Report:** 994824  
**Project:** RED-HILL  
**Group:** Weekly TPH-8015\_RED-HILL (2022)  
- EMAX

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

---

**Folder Comments**

Results for TPH Gas, Diesel and Motor Oil are submitted by Emax Laboratories



Eaton Analytical

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

**Laboratory Hits**

**Report:** 994824  
**Project:** RED-HILL  
**Group:** Weekly TPH-8015\_RED-HILL (2022)  
- EMAX

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

Samples Received on:  
03/24/2022 1237

---

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL
----------	---------	-----------	--------	----------	-------	-----

---

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

Laboratory Data

Report: 994824  
 Project: RED-HILL  
 Group: Weekly TPH-8015\_RED-HILL (2022)  
 - EMAX

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

Samples Received on:  
 03/24/2022 1237

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b><u>AIEA GULCH WELLS P1 (331-201-TP071) (202203240059)</u></b>						<b>Sampled on 03/22/2022 1058</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
03/25/22	03/25/22 19:24			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>									
03/29/22	03/30/22 14:26			(SW 8015B)	TPH Diesel	ND	mg/L	0.026	1
03/29/22	03/30/22 14:26			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.052	1
<b><u>AIEA GULCH WELLS P2 (331-202-TP072) (202203240060)</u></b>						<b>Sampled on 03/22/2022 1121</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
03/25/22	03/25/22 21:07			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>									
03/29/22	03/30/22 15:22			(SW 8015B)	TPH Diesel	ND	mg/L	0.026	1
03/29/22	03/30/22 15:22			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.052	1
<b><u>TRAVEL BLANK (202203240061)</u></b>						<b>Sampled on 03/22/2022 1058</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
03/25/22	03/25/22 21:41			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1

Rounding on totals after summation.  
 (c) - indicates calculated results. Analysis is a calculated result. Reported results are not rounded until the final step before reporting. Therefore methods that use a test result with further calculation may have slight differences in final result than the component analyses.



Eaton Analytical

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

Laboratory Hits

Report: 994824  
Project: RED-HILL  
Group: Weekly TPH-8015\_RED-HILL (2022)  
- EMAX

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

Samples Received on:  
03/24/2022 1237

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
----------	---------	-----------	--------	-------------	-------	-----

SUMMARY OF POSITIVE DATA ONLY



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

Date: 04-12-2022  
EMAX Batch No.: 22C318

Attn: Jackie Contreras

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

Subject: Laboratory Report  
Project: 994824

Enclosed is the Laboratory report for samples received on 03/25/22.  
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202203240059	C318-01	03/22/22	WATER	TPH GASOLINE TPH DIESEL & MOTOR OIL
202203240060	C318-02	03/22/22	WATER	TPH GASOLINE TPH DIESEL & MOTOR OIL
202203240061	C318-03	03/22/22	WATER	TPH GASOLINE
202203240059MS	C318-01M	03/22/22	WATER	TPH GASOLINE TPH DIESEL & MOTOR OIL
202203240059MSD	C318-01S	03/22/22	WATER	TPH GASOLINE TPH DIESEL & MOTOR OIL

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 #: 994824 Report Due: 03/31/2022

Date: 3/25/2022

Submittal Form

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 994824 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.

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) 396-1165 Fax (626) 398-1122  
Invoices to: Eurofins Eaton Analytical, LLC  
Accounts Payable 2435 New Holland Pike, Lancaster PA 17605

Provide in each Report the Specified State Certification # and Exp. Date for requester (e.g. # and Exp. Date for requester 1488 - MATW).  
Samples from: MAYMAI

2-3 day rush

Sample ID 202203240059 (1) Client Sample ID for reference on! AIEA GULCHWELLS P1 (331-201-TP071)

Sample type: Sample Event: Analysis Requested (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil

Method SW 8015B EPA 5030C  
SW 8015B EPA 3550B  
Prep Method Analysis Requested (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil

Sample ID 202203240060 (2) Client Sample ID for reference on! AIEA GULCHWELLS P2 (331-202-TP072)

Sample type: Sample Event: Analysis Requested (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil

Method SW 8015B EPA 5030C  
SW 8015B EPA 3550B  
Prep Method Analysis Requested (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil

Sample ID 202203240061 (3) Client Sample ID for reference on! TB

Sample type: Sample Event: Analysis Requested (SUB)Gas Fraction Hydrocarbons

Method SW 8015B EPA 5030C  
Prep Method Analysis Requested (SUB)Gas Fraction Hydrocarbons

Relinquished by: Jackie Contreras Date 3/25/22 Time 14:45  
Received by: Jackie Contreras Date 03/25/22 Time 14:45  
Relinquished by: Jackie Contreras Date 03/25/22 Time 14:45  
Received by: Jackie Contreras Date 03/25/22 Time 14:45

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp - 4.5/4.0, 2.8/2.3



Type of Delivery <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others	Airbill / Tracking Number	ECN <u>22C318</u>
<input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery		Recipient <u>Maria Rivera</u>
		Date <u>03/25/22</u> Time <u>14:45</u>

**COC INSPECTION**

<input checked="" type="checkbox"/> Client Name	<input type="checkbox"/> Client PM/FC	<input type="checkbox"/> Sampler Name	<input checked="" type="checkbox"/> Sampling Date/Time	<input checked="" type="checkbox"/> Sample ID	<input type="checkbox"/> Matrix
<input checked="" type="checkbox"/> Address	<input 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 <u>Correction</u>	<input type="checkbox"/> Custody Seal	<input type="checkbox"/> Intact	<input type="checkbox"/> Damaged
Packaging <u>Factor: -0.5</u>	<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>4.5/5.0</u> °C	<input checked="" type="checkbox"/> Cooler 2 <u>2.8/2.3</u> °C	<input type="checkbox"/> Cooler 3 _____ °C
Thermometer: <u>A - S/N _____</u>	<input type="checkbox"/> Cooler 6 <u>4.0</u> °C	<input type="checkbox"/> Cooler 7 _____ °C	<input type="checkbox"/> Cooler 4 _____ °C
	<input type="checkbox"/> Cooler 8 _____ °C	<input type="checkbox"/> Cooler 9 _____ °C	<input type="checkbox"/> Cooler 5 _____ °C
		<input checked="" type="checkbox"/> S/N <u>210271399</u>	<input type="checkbox"/> Cooler 10 _____ °C
			D - S/N _____

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

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

**DISCREPANCIES**

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
<u>1,2</u>	<u>U-12, 16-21</u>	<u>D1</u>	<u>Jet Fuel 5 Analysis indicated on label, COC requests Diesel and motor oil only</u>	<u>NR</u> <u>↓</u>
<u>CB/25/22</u>				

pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. NR 3/25/22

**NOTES/OBSERVATIONS:**

SAMPLE MATRIX IS DRINKING WATER?  YES  NO

- LEGEND:**
- |   |   |  |
|---|---|--|
| <p><b>Code Description-Sample Management</b></p> <p><u>D1</u> Analysis is not indicated in <u>COC</u></p> <p>D2 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>D7 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>D10 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 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 preserved as necessary</p> <p>R8 <u>Informed Client</u></p> <p>R9 _____</p> <p>R10 _____</p> <p>R11 _____</p> <p>R12 _____</p> |
|---|---|--|

**REVIEWS:**

Sample Labeling Maria Rivera SRF Quintana PM NR

Date 03/25/22 3/25/22 Date 3/25/22 Date 3/25/22

## REPORTING CONVENTIONS

### DATA QUALIFIERS:

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

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

### ACRONYMS AND ABBREVIATIONS:

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

### DATES

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

994824

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

SDG#: 22C318

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 994824

SDG : 22C318

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

A total of three(3) water samples were received on 03/25/22 to be analyzed for Total Petroleum Hydrocarbons by Purge And Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

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

Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VGH7C10B - 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. VGH7C10L/VGH7C10C were within LCS limits. Refer to LCS summary form for details.

Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Gasoline was within MS QC limits in C318-01M/C318-01S. 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 : 994824

SDG NO. : 22C318  
Instrument ID : H7

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
									WATER
MBLK1W	VGH7C10B	1	NA	03/25/2211:24	03/25/2211:24	AC25004A	AC25003A	22VGH7C10	Method Blank
LCS1W	VGH7C10L	1	NA	03/25/2211:58	03/25/2211:58	AC25005A	AC25003A	22VGH7C10	Lab Control Sample (LCS)
LCD1W	VGH7C10C	1	NA	03/25/2212:32	03/25/2212:32	AC25006A	AC25003A	22VGH7C10	LCS Duplicate
202203240059	C318-01	1	NA	03/25/2219:24	03/25/2219:24	AC25018A	AC25013A	22VGH7C10	Field Sample
202203240059MS	C318-01M	1	NA	03/25/2219:58	03/25/2219:58	AC25019A	AC25013A	22VGH7C10	Matrix Spike Sample (MS)
202203240059MSD	C318-01S	1	NA	03/25/2220:32	03/25/2220:32	AC25020A	AC25013A	22VGH7C10	MS Duplicate (MSD)
202203240060	C318-02	1	NA	03/25/2221:07	03/25/2221:07	AC25021A	AC25013A	22VGH7C10	Field Sample
202203240061	C318-03	1	NA	03/25/2221:41	03/25/2221:41	AC25022A	AC25013A	22VGH7C10	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: 03/22/22 10:58  
Project : 994824 Date Received: 03/25/22  
Batch No. : 22C318 Date Extracted: 03/25/22 19:24  
Sample ID : 202203240059 Date Analyzed: 03/25/22 19:24  
Lab Samp ID: C318-01 Dilution Factor: 1  
Lab File ID: AC25018A Matrix: WATER  
Ext Btch ID: 22VGH7C10 % Moisture: NA  
Calib. Ref.: AC25013A Instrument ID: H7  
=====

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0389	0.0400	97	60-140

Notes:

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

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

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

```

=====
Client       : EUROFINS EATON ANALYTICAL      Date Collected: 03/22/22 11:21
Project      : 994824                         Date Received: 03/25/22
Batch No.    : 22C318                         Date Extracted: 03/25/22 21:07
Sample ID    : 202203240060                  Date Analyzed: 03/25/22 21:07
Lab Samp ID  : C318-02                       Dilution Factor: 1
Lab File ID  : AC25021A                      Matrix: WATER
Ext Btch ID  : 22VGH7C10                    % Moisture: NA
Calib. Ref.  : AC25013A                     Instrument ID: H7
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0366	0.0400	91	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: 03/22/22 10:58
Project      : 994824                      Date Received: 03/25/22
Batch No.    : 22C318                      Date Extracted: 03/25/22 21:41
Sample ID    : 202203240061               Date Analyzed: 03/25/22 21:41
Lab Samp ID  : C318-03                    Dilution Factor: 1
Lab File ID  : AC25022A                   Matrix: WATER
Ext Btch ID  : 22VGH7C10                  % Moisture: NA
Calib. Ref.  : AC25013A                   Instrument ID: H7
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
GASOLINE	ND	0.020	0.010	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0348	0.0400	87	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: 03/25/22 11:24
Project     : 994824                     Date Received: 03/25/22
Batch No.   : 22C318                     Date Extracted: 03/25/22 11:24
Sample ID   : MBLK1W                     Date Analyzed: 03/25/22 11:24
Lab Samp ID : VGH7C10B                   Dilution Factor: 1
Lab File ID : AC25004A                   Matrix: WATER
Ext Btch ID : 22VGH7C10                  % Moisture: NA
Calib. Ref. : AC25003A                   Instrument ID: H7
=====
  
```

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0386	0.0400	97	60-140

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

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

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994824  
BATCH NO. : 22C318  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W         LCD1W
LAB SAMPLE ID : VGH7C10B                         VGH7C10L     VGH7C10C
LAB FILE ID  : AC25004A                         AC25005A     AC25006A
DATE PREPARED : 03/25/22 11:24                 03/25/22 11:58 03/25/22 12:32
DATE ANALYZED : 03/25/22 11:24                 03/25/22 11:58 03/25/22 12:32
PREP BATCH   : 22VGH7C10                       22VGH7C10    22VGH7C10
CALIBRATION REF: AC25003A                       AC25003A     AC25003A
  
```

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	0.495	99	0.500	0.440	88	12	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0494	124	0.0400	0.0419	105	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 : 994824  
BATCH NO. : 22C318  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202203240059                      202203240059MS 202203240059MSD
LAB SAMPLE ID : C318-01                         C318-01M      C318-01S
LAB FILE ID  : AC25018A                         AC25019A      AC25020A
DATE PREPARED : 03/25/22 19:24                  03/25/22 19:58 03/25/22 20:32
DATE ANALYZED : 03/25/22 19:24                  03/25/22 19:58 03/25/22 20:32
PREP BATCH   : 22VGH7C10                       22VGH7C10     22VGH7C10
CALIBRATION REF: AC25013A                       AC25013A      AC25013A
  
```

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	0.485	97	0.500	0.413	83	16	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0463	116	0.0400	0.0436	109	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

994824

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22C318

## CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 994824

SDG : 22C318

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

A total of two(2) water samples were received on 03/25/22 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

#### Holding Time

Samples were analyzed within the prescribed holding time.

#### Calibration

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

#### Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSC038WB - 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. DSC038WL/DSC038WC 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 22C318-01M/22C318-01S. 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

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

LAB CHRONICLE  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL  
Project : 994824

SDG NO. : 22C318  
Instrument ID : D5

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSC038WB	1	NA	03/30/2213:32	03/29/2213:45	LC30007A	LC30003A	22DSC038W	Method Blank
LCS1W	DSC038WL	1	NA	03/30/2213:50	03/29/2213:45	LC30008A	LC30003A	22DSC038W	Lab Control Sample (LCS)
LCD1W	DSC038WC	1	NA	03/30/2214:08	03/29/2213:45	LC30009A	LC30003A	22DSC038W	LCS Duplicate
202203240059	C318-01	1	NA	03/30/2214:26	03/29/2213:45	LC30010A	LC30003A	22DSC038W	Field Sample
202203240059MS	C318-01M	1	NA	03/30/2214:45	03/29/2213:45	LC30011A	LC30003A	22DSC038W	Matrix Spike Sample (MS)
202203240059MSD	C318-01S	1	NA	03/30/2215:03	03/29/2213:45	LC30012A	LC30003A	22DSC038W	MS Duplicate (MSD)
202203240060	C318-02	1	NA	03/30/2215:22	03/29/2213:45	LC30013A	LC30003A	22DSC038W	Field Sample

FN - Filename  
% Moist - Percent Moisture



# **SAMPLE RESULTS**

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/22/22 10:58
Project     : 994824                     Date Received: 03/25/22
Batch No.   : 22C318                     Date Extracted: 03/29/22 13:45
Sample ID   : 202203240059              Date Analyzed: 03/30/22 14:26
Lab Samp ID : 22C318-01                 Dilution Factor: 1
Lab File ID : LC30010A                  Matrix: WATER
Ext Btch ID: 22DSC038W                  % Moisture: NA
Calib. Ref.: LC30003A                   Instrument ID: D5
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)		
-----	-----	-----	-----		
Diesel	ND	0.026	0.013		
Motor Oil	ND	0.052	0.026		
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT	
-----	-----	-----	-----	-----	
Bromobenzene	0.415	0.525	79	60-130	
Hexacosane	0.123	0.131	93	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    : 950ml                      Final Volume : 5ml  
Prepared by      : JMuert                             Analyzed by : SDeeso

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/22/22 11:21
Project     : 994824                     Date Received: 03/25/22
Batch No.   : 22C318                     Date Extracted: 03/29/22 13:45
Sample ID   : 202203240060              Date Analyzed: 03/30/22 15:22
Lab Samp ID: 22C318-02                  Dilution Factor: 1
Lab File ID: LC30013A                   Matrix: WATER
Ext Btch ID: 22DSC038W                  % Moisture: NA
Calib. Ref.: LC30003A                   Instrument ID: D5
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
Diesel	ND	0.026	0.013	
Motor Oil	ND	0.052	0.026	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.438	0.525	83	60-130
Hexacosane	0.126	0.131	96	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 : 950ml                      Final Volume : 5ml  
Prepared by : JMuert                         Analyzed by : SDeeso

# QC SUMMARIES

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/29/22 13:45
Project     : 994824                     Date Received: 03/29/22
Batch No.   : 22C318                     Date Extracted: 03/29/22 13:45
Sample ID   : MBLK1W                     Date Analyzed: 03/30/22 13:32
Lab Samp ID: DSC038WB                    Dilution Factor: 1
Lab File ID: LC30007A                    Matrix: WATER
Ext Btch ID: 22DSC038W                   % Moisture: NA
Calib. Ref.: LC30003A                     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	0.421	0.500	84	60-130
Hexacosane	0.128	0.125	102	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 : JMuert                              Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994824  
BATCH NO. : 22C318  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W         LCD1W
LAB SAMPLE ID : DSC038WB                         DSC038WL     DSC038WC
LAB FILE ID  : LC30007A                         LC30008A     LC30009A
DATE PREPARED : 03/29/22 13:45                 03/29/22 13:45 03/29/22 13:45
DATE ANALYZED : 03/30/22 13:32                 03/30/22 13:50 03/30/22 14:08
PREP BATCH   : 22DSC038W                       22DSC038W    22DSC038W
CALIBRATION REF: LC30003A                       LC30003A     LC30003A
  
```

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	2.48	99	2.50	2.59	104	4	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.418	84	0.500	0.423	85	60-130
Hexacosane	0.125	0.125	100	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 : 994824  
BATCH NO. : 22C318  
METHOD : 3520C/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : 202203240059	202203240059MS	202203240059MSD
LAB SAMPLE ID : 22C318-01	22C318-01M	22C318-01S
LAB FILE ID : LC30010A	LC30011A	LC30012A
DATE PREPARED : 03/29/22 13:45	03/29/22 13:45	03/29/22 13:45
DATE ANALYZED : 03/30/22 14:26	03/30/22 14:45	03/30/22 15:03
PREP BATCH : 22DSC038W	22DSC038W	22DSC038W
CALIBRATION REF: LC30003A	LC30003A	LC30003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.62	2.62	100	2.60	2.61	100	0	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.525	0.421	80	0.520	0.406	78	60-130
Hexacosane	0.131	0.136	104	0.130	0.127	98	60-130

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