

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  
04/11/2022

*Rinda Seddas*  
EUROFINS EATON  
ANALYTICAL, LLC



Utah ELCP CA00006

DEB: Debbie L Frank  
Project Manager

Report: 994684  
Project: RED-HILL  
Group: Weekly TPH-8015\_RED-HILL (2022)

\* 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 Pseudalert	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 #: 994684  
Project: RED-HILL  
Sample Group: Weekly TPH-8015\_RED-HILL (2022)

Project Manager: Debbie L Frank  
Phone: (626) 386-1149  
PO #: C20525101 exp 05312023

The following samples were received from you on **March 23, 2022** at 1133. 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
202203230514	AIEA WELLS PUMP 2 (331-004-WL103)	03/21/2022 1053
	(SUB)Gas Fraction Hydrocarbons	TPH 8015 Diesel and Motor Oil
	TPH 8015 Jef Fuel 8	TPH 8015 Jet Fuel 5

**Test Description**





### Kit Order for Honolulu Board of Water Supply

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

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

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

**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 #: 308898

Created By: - [AutoGenerated]  
Deliver By: 01/26/2022  
STG: 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 8_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>	

**Sum Bottles: 17**

### Comments

SITE ID: MOANALUA WELLS - Every 1 wee

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 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



Eurolins Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

**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

EEA Folder Number: 994684

IR Gun ID = 649A (Observation = 4.0 °C) (Corr.Factor = 0.3 °C) (Final = 3.7 °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(6251,652), 505, SPME, @CH, 532LCMS, 556, 536, Anatoxin, LCMS methods using 40 ml vials, International clients:

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

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

RECEIVED BY: [Signature] SIGNATURE: G. FEINER PRINT NAME: \_\_\_\_\_ DATE: 03232022 COMPANY/TITLE: Eurolins Eaton Analytical TIME: 1:33

SAMPLES CHECKED AGAINST COC BY: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ COMPANY/TITLE: Eurolins Eaton Analytical TIME: \_\_\_\_\_





# INTERNAL CHAIN OF CUSTODY RECORD

**eurolfins** | **Eaton Analyticals**

EEA Folder Number: 994684

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 = 5.1 °C) (Corr. Factor = -0.3 °C) (Final = 4.8 °C) Thawed  Partially Frozen  Frozen  N/A

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)

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)

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

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) Expiration Date \_\_\_\_\_ Results: \_\_\_\_\_

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) 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(5251,552), 505, SPME, @CH, 532LCMS, 556, 536, Analoxin, LCMS methods using 40 ml vials, international clients:  
 Smp ID Bottle # None/<8 >8mm Test Smp ID Bottle # None/<8 >8mm Test

Smp ID Bottle #	None/<8	>8mm	Test
Smp ID Bottle #	None/<8	>8mm	Test
Smp ID Bottle #	None/<8	>8mm	Test
Smp ID Bottle #	None/<8	>8mm	Test
Smp ID Bottle #	None/<8	>8mm	Test

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

RECEIVED BY: <u>G. PEINER</u>	SIGNATURE
PRINT NAME	DATE
Eurolfins Eaton Analytical	03/23/2022
TIME	11:33

SAMPLES CHECKED AGAINST COC BY: _____	SIGNATURE
PRINT NAME	DATE
Eurolfins Eaton Analytical	TIME

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

SHIP DATE: 22MAR22  
ACTWGT: 63.00 LB  
CAD: 100205419/INET4460

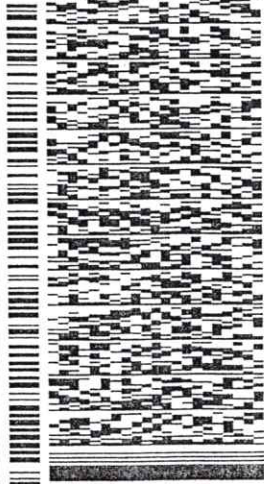
BILL RECIPIENT

TO C CHUCK  
EUROFINS EATON ANALYTICAL, INC  
750 ROYAL OAKS DR  
SUITE 100  
MONROVIA CA 91016

56DUJ5EB02FE4A

INV: (626) 386-1178 REF:

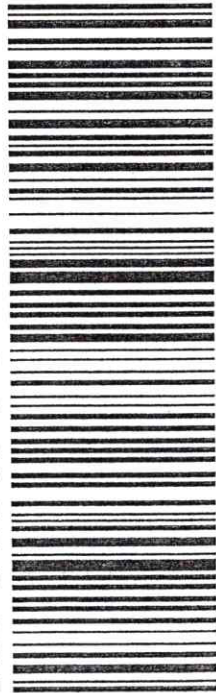
PO: DEPT:



WED - 23 MAR 10:30A  
PRIORITY OVERNIGHT

1 of 3  
TRK# 7763 6717 1247  
0201  
## MASTER ##

91016  
BUR  
CA-US



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BWS CHEMLAB  
HONOLULU BOARD OF WATER SUPPLY  
630 S. BERETANIA ST.  
CHEMICAL LABORATORY  
HONOLULU, HI 96843  
UNITED STATES US

SHIP DATE: 22MAR22  
ACTWGT: 63.00 LB  
CAD: 100205419/INET4460

BILL RECIPIENT

TO **C CHUCK**  
**EUROFINS EATON ANALYTICAL, INC**  
**750 ROYAL OAKS DR**  
**SUITE 100**  
**MONROVIA CA 91016**

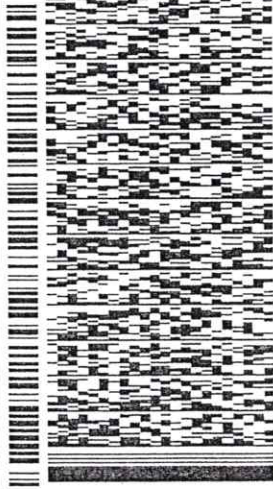
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REF:

PO:

DEPT:



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2 of 3

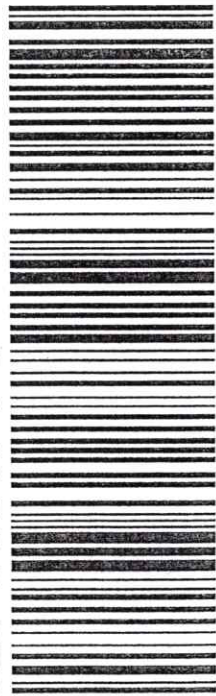
MPS# 7763 6717 1501

0263

Mstr# 7763 6717 1247

0201

**WZ WHPA**  
CA-US  
**91016**  
**BUR**



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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: 22MAR22  
ACTWGT: 63.00 LB  
CAD: 100205419/NET4460

BILL RECIPIENT

TO C CHUCK

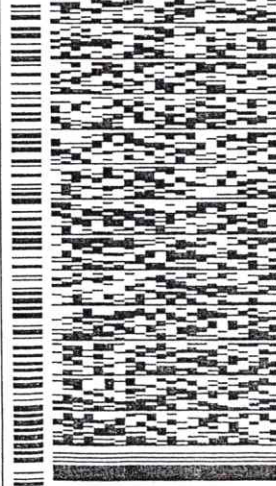
EUROFINS EATON ANALYTICAL, INC  
750 ROYAL OAKS DR  
SUITE 100  
MONROVIA CA 91016

INV (626) 386-1178

REF.

56DJ5/EB02/FE4A

DEPT



J221022010501uv

WED - 23 MAR 10:30A  
PRIORITY OVERNIGHT

3 of 3

MPS# 7763 6717 1821

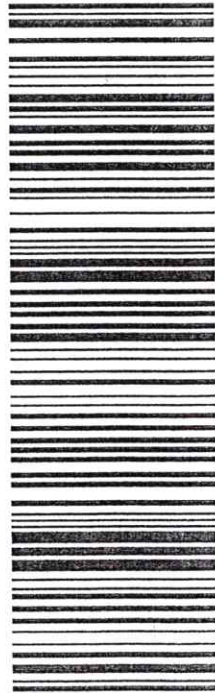
0263

Mstr# 7763 6717 1247

0201

91016  
CA-US BUR

WZ WHPA



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

**Laboratory Comments**

**Report:** 994684  
**Project:** RED-HILL  
**Group:** Weekly TPH-8015\_RED-HILL (2022)

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

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**Folder Comments**

Results for TPH Gas, TPH Diesel, Motor Oil and Jet Fuels 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: 994684  
Project: RED-HILL  
Group: Weekly TPH-8015\_RED-HILL (2022)

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

Samples Received on:  
03/23/2022 1133

---

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

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**SUMMARY OF POSITIVE DATA ONLY**

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

Laboratory Data

Report: 994684  
 Project: RED-HILL  
 Group: Weekly TPH-8015\_RED-HILL (2022)

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

Samples Received on:  
 03/23/2022 1133

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b><u>AIEA WELLS PUMP 2 (331-004-WL103) (202203230514)</u></b>						<b>Sampled on 03/21/2022 1053</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
03/24/22	03/24/22 20:48			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>									
03/24/22	03/25/22 19:18			(SW 8015B)	TPH Diesel	ND	mg/L	0.024	1
03/24/22	03/25/22 19:18			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.047	1
<b>EPA 8015 - Jet Fuel 5 C8-C18</b>									
03/24/22	03/25/22 19:18			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.047	1
<b>EPA 8015 - Jet Fuel 8 C8-C18</b>									
	03/25/22 19:18			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.047	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.



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

Date: 04-01-2022  
EMAX Batch No.: 22C300

Attn: Jackie Contreras

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

Subject: Laboratory Report  
Project: 994684

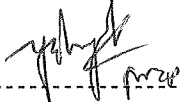
-----  
Enclosed is the Laboratory report for samples received on 03/24/22.  
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202203230514	C300-01	03/21/22	WATER	TPH GASOLINE TPH

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



\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers/ Report & Invoice must have the Folder# 994684 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.

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

2-3 day rush

**eurofins** Eaton Analytical  
Ship To:  
EMAX Laboratories, Inc.  
3051 Fujita St.  
Torrance, CA 90505  
Phone: 310-618-8889 Fax: 310-618-0818  
Folder #: 994684 Report Due: 03/30/2022

Sample ID: 202203230514 Client Sample ID for reference onl: AIEA WELLS PUMP 2 (331-004-WL103)  
Sample type: Sample Event: Sample ID: Facility ID: Sample Point ID: Static ID: JLS

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

Temp. 1.0/0.5, 4.5/5.0

Relinquished by: [Signature] Sample Control Date: 3/24/22 Time: 12:44

Received by: [Signature] Date: 03/24/22 Time: 12:44

Relinquished by: Sample Control Date: Time:

Received by: Sample Control Date: Time:

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Type of Delivery <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others <input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery	Airbill / Tracking Number	ECN 22C300 Recipient <u>Jocelyne Ramos</u> Date <u>3/24/22</u> Time <u>12:44</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>1.0/0.5 °C</u>	<input checked="" type="checkbox"/> Cooler 2 <u>24.5/5.0C</u>	<input type="checkbox"/> Cooler 3 _____ °C
Thermometer:	<input type="checkbox"/> Cooler 6 _____ °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 type="checkbox"/> Cooler 10 _____ °C		<input type="checkbox"/> Cooler 6 _____ °C

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

**DISCREPANCIES**

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
<u>1</u>	<u>4-8</u>	<u>D22</u>		<u>128</u>
<i>(Large diagonal line through the table)</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 3/25/22

NOTES/OBSERVATIONS:  
SAMPLE MATRIX IS DRINKING WATER?  YES  NO

- LEGEND:**
- |  |   |  |
|--|---|--|
| <p><input type="checkbox"/> Continue to next page.</p> <p><b>Code Description-Sample Management</b></p> <p>D1 Analysis is not indicated in _____</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><u>D22 Jet Fuel &amp; Analysis not indicated on label</u></p> <p>D23 _____</p> <p>D24 _____</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 <u>Maria Rivera</u>	SRF <u>Cecilia</u>	PM <u>MS</u>
Date <u>3/24/22</u>	Date <u>3/24/22</u>	Date <u>3/25/22</u>

## 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

994684

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

SDG#: 22C300

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 994684

SDG : 22C300

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

One(1) water sample was received on 03/24/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/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. VGH7C09B - 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. VGH7C09L/VGH7C09C 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 C279-01M/C279-01S. 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

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 PURGE AND TRAP

```

=====
Client      : EUROFINS EATON ANALYTICAL
Project    : 994684
=====
SDG NO.    : 22C300
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	VGH7C09B	1	NA	03/24/2211:38	03/24/2211:38	AC24005A	AC24004A	22VGH7C09	Method Blank
LCS1W	VGH7C09L	1	NA	03/24/2212:12	03/24/2212:12	AC24006A	AC24004A	22VGH7C09	Lab Control Sample (LCS)
LCD1W	VGH7C09C	1	NA	03/24/2212:47	03/24/2212:47	AC24007A	AC24004A	22VGH7C09	LCS Duplicate
202203230514	C300-01	1	NA	03/24/2220:48	03/24/2220:48	AC24021A	AC24014A	22VGH7C09	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: 03/21/22 10:53
Project    : 994684                          Date Received: 03/24/22
Batch No.  : 22C300                          Date Extracted: 03/24/22 20:48
Sample ID  : 202203230514                    Date Analyzed: 03/24/22 20:48
Lab Samp ID: C300-01                          Dilution Factor: 1
Lab File ID: AC24021A                          Matrix: WATER
Ext Btch ID: 22VGH7C09                        % Moisture: NA
Calib. Ref.: AC24014A                        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	0.0373	0.0400	93	60-140

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

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



# QC SUMMARIES

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

```

=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: 03/24/22 11:38
Project    : 994684                          Date Received: 03/24/22
Batch No.  : 22C300                          Date Extracted: 03/24/22 11:38
Sample ID  : MBLK1W                          Date Analyzed: 03/24/22 11:38
Lab Samp ID: VGH7C09B                        Dilution Factor: 1
Lab File ID: AC24005A                        Matrix: WATER
Ext Btch ID: 22VGH7C09                       % Moisture: NA
Calib. Ref.: AC24004A                       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	0.0384	0.0400	96	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 : 994684  
BATCH NO. : 22C300  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : MBLK1W                             LCS1W         LCD1W
LAB SAMPLE ID : VGH7C09B                         VGH7C09L     VGH7C09C
LAB FILE ID  : AC24005A                         AC24006A     AC24007A
DATE PREPARED : 03/24/22 11:38                 03/24/22 12:12 03/24/22 12:47
DATE ANALYZED : 03/24/22 11:38                 03/24/22 12:12 03/24/22 12:47
PREP BATCH   : 22VGH7C09                       22VGH7C09   22VGH7C09
CALIBRATION REF: AC24004A                       AC24004A     AC24004A
  
```

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	0.438	88	0.500	0.466	93	6	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0465	116	0.0400	0.0475	119	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 : 994587  
BATCH NO. : 22C279  
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: 202203230224	202203230224MS	202203230224MSD
LAB SAMPLE ID	: C279-01	C279-01M	C279-01S
LAB FILE ID	: AC24008A	AC24009A	AC24010A
DATE PREPARED	: 03/24/22 13:21	03/24/22 13:56	03/24/22 14:30
DATE ANALYZED	: 03/24/22 13:21	03/24/22 13:56	03/24/22 14:30
PREP BATCH	: 22VGH7C09	22VGH7C09	22VGH7C09
CALIBRATION REF:	AC24004A	AC24004A	AC24004A

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	0.461	92	0.500	0.421	84	9	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0459	115	0.0400	0.0443	111	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

994684

METHOD 3520C/8015B  
PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22C299

## CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 994684

SDG : 22C300

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

One(1) water sample was received on 03/24/22 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. DSC033WB - result was compliant to project requirement. Refer to sample result summary form for details.

#### Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSC033WL. Refer to LCS summary form for details.

#### Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 22C279-01M/22C279-01S. 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: 994684

SDG : 22C300

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

One(1) water sample was received on 03/24/22 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. DSC033WB - result was compliant to project requirement. Refer to sample result summary form for details.

#### Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP5 was within LCS QC limits in J5C033WL. Refer to LCS summary form for details.

#### Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22C279-01M/22C279-01S. 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: 994684

SDG : 22C300

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

One(1) water sample was received on 03/24/22 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. DSC033WB - result was compliant to project requirement. Refer to sample result summary form for details.

#### Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for JP8 was within LCS QC limits in J8C033WL. Refer to LCS summary form for details.

#### Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. One(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22C279-01M/22C279-01S. 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.







LAB CHRONICLE  
PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL
Project    : 994684
=====
SDG NO.    : 22C300
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
MBLKTW	DSC033WB	1	NA	03/25/2215:19	03/24/2215:30	LC25009A	LC25005A	22DSC033W	Method Blank
LCS1W	J8C033WL	1	NA	03/25/2216:15	03/24/2215:30	LC25012A	LC25005A	22DSC033W	Lab Control Sample (LCS)
202203230514	C300-01	1	NA	03/25/2219:18	03/24/2215:30	LC25022A	LC25005A	22DSC033W	Field Sample

```

FN      - Filename
% Moist - Percent Moisture

```

# **SAMPLE RESULTS**



METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL      Date Collected: 03/21/22 10:53
Project     : 994684                          Date Received: 03/24/22
Batch No.   : 22C300                          Date Extracted: 03/24/22 15:30
Sample ID   : 202203230514                    Date Analyzed: 03/25/22 19:18
Lab Samp ID: 22C300-01                        Dilution Factor: 1
Lab File ID: LC25022A                          Matrix: WATER
Ext Btch ID: 22DSC033W                        % Moisture: NA
Calib. Ref.: LC25004A                          Instrument ID: D5
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.047	0.024

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.457	0.470	97	60-130
Hexacosane	0.129	0.118	110	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 : 1060ml                      Final Volume : 5ml  
 Prepared by : P0reto/JMuert                Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/21/22 10:53
Project     : 994684                     Date Received: 03/24/22
Batch No.   : 22C300                     Date Extracted: 03/24/22 15:30
Sample ID   : 202203230514              Date Analyzed: 03/25/22 19:18
Lab Samp ID: 22C300-01                   Dilution Factor: 1
Lab File ID: LC25022A                     Matrix: WATER
Ext Btch ID: 22DSC033W                    % Moisture: NA
Calib. Ref.: LC25005A                     Instrument ID: D5
=====
  
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.047	0.024

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.457	0.470	97	60-130
Hexacosane	0.129	0.118	110	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 : 1060ml                      Final Volume : 5ml  
 Prepared by : POrreto/JMuert                Analyzed by : SDeeso

# QC SUMMARIES



METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/24/22 15:30
Project    : 994684                      Date Received: 03/24/22
Batch No.  : 22C300                      Date Extracted: 03/24/22 15:30
Sample ID  : MBLK1W                      Date Analyzed: 03/25/22 15:19
Lab Samp ID: DSC033WB                   Dilution Factor: 1
Lab File ID: LC25009A                   Matrix: WATER
Ext Btch ID: 22DSC033W                  % Moisture: NA
Calib. Ref.: LC25003A                   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	0.431	0.500	86	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 : POrto/JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994684  
BATCH NO. : 22C300  
METHOD : 3520C/8015B

=====

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSC033WB DSC033WL  
LAB FILE ID : LC25009A LC25010A  
DATE PREPARED : 03/24/22 15:30 03/24/22 15:30  
DATE ANALYZED : 03/25/22 15:19 03/25/22 15:38  
PREP BATCH : 22DSC033W 22DSC033W  
CALIBRATION REF: LC25003A LC25003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.30	92	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.449	90	60-130
Hexacosane	0.125	0.130	104	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994587  
BATCH NO. : 22C279  
METHOD : 3520C/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : 202203230224	202203230224MS	202203230224MSD
LAB SAMPLE ID : 22C279-01	22C279-01M	22C279-01S
LAB FILE ID : LC25013A	LC25014A	LC25015A
DATE PREPARED : 03/24/22 15:30	03/24/22 15:30	03/24/22 15:30
DATE ANALYZED : 03/25/22 16:33	03/25/22 16:51	03/25/22 17:10
PREP BATCH : 22DSC033W	22DSC033W	22DSC033W
CALIBRATION REF: LC25003A	LC25003A	LC25003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.75	2.78	101	2.70	2.59	96	7	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.550	0.507	92	0.540	0.545	101	60-130
Hexacosane	0.138	0.166	121	0.135	0.156	116	60-130

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

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/24/22 15:30
Project     : 994684                      Date Received: 03/24/22
Batch No.   : 22C300                      Date Extracted: 03/24/22 15:30
Sample ID   : MBLK1W                     Date Analyzed: 03/25/22 15:19
Lab Samp ID: DSC033WB                   Dilution Factor: 1
Lab File ID: LC25009A                   Matrix: WATER
Ext Btch ID: 22DSC033W                  % Moisture: NA
Calib. Ref.: LC25004A                   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	0.431	0.500	86	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 : POrreto/JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994684  
BATCH NO. : 22C300  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSC033WB J5C033WL  
LAB FILE ID : LC25009A LC25011A  
DATE PREPARED : 03/24/22 15:30 03/24/22 15:30  
DATE ANALYZED : 03/25/22 15:19 03/25/22 15:56  
PREP BATCH : 22DSC033W 22DSC033W  
CALIBRATION REF: LC25004A LC25004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.22	89	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.526	105	60-130
Hexacosane	0.125	0.139	111	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994587  
BATCH NO. : 22C279  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                                % MOISTURE:NA
DILUTION FACTOR: 1                                1
SAMPLE ID   : 202203230224                        202203230224MSD
LAB SAMPLE ID : 22C279-01                          22C279-01S
LAB FILE ID  : LC25013A                            LC25017A
DATE PREPARED : 03/24/22 15:30                    03/24/22 15:30
DATE ANALYZED : 03/25/22 16:33                    03/25/22 17:46
PREP BATCH   : 22DSC033W                          22DSC033W
CALIBRATION REF: LC25004A                          LC25004A
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.55	2.16	85	2.62	2.16	82	0	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.510	0.496	97	0.525	0.442	84	60-130
Hexacosane	0.127	0.135	106	0.131	0.146	111	60-130

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

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 03/24/22 15:30
Project     : 994684                     Date Received: 03/24/22
Batch No.   : 22C300                     Date Extracted: 03/24/22 15:30
Sample ID   : MBLK1W                     Date Analyzed: 03/25/22 15:19
Lab Samp ID: DSC033WB                   Dilution Factor: 1
Lab File ID: LC25009A                   Matrix: WATER
Ext Btch ID: 22DSC033W                 % Moisture: NA
Calib. Ref.: LC25005A                 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	0.431	0.500	86	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 : POrto/JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994684  
BATCH NO. : 22C300  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSC033WB J8C033WL  
LAB FILE ID : LC25009A LC25012A  
DATE PREPARED : 03/24/22 15:30 03/24/22 15:30  
DATE ANALYZED : 03/25/22 15:19 03/25/22 16:15  
PREP BATCH : 22DSC033W 22DSC033W  
CALIBRATION REF: LC25005A LC25005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.22	89	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.522	104	60-130
Hexacosane	0.125	0.128	102	60-130

MB: Method Blank sample LCS: Lab Control Sample



EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 994587  
BATCH NO. : 22C279  
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR:	1	1
SAMPLE ID	: 202203230224	202203230224MSD
LAB SAMPLE ID	: 22C279-01	22C279-01S
LAB FILE ID	: LC25013A	LC25019A
DATE PREPARED	: 03/24/22 15:30	03/24/22 15:30
DATE ANALYZED	: 03/25/22 16:33	03/25/22 18:23
PREP BATCH	: 22DSC033W	22DSC033W
CALIBRATION REF:	LC25005A	LC25005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.55	2.15	84	2.53	2.33	92	8	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.510	0.535	105	0.505	0.552	109	60-130
Hexacosane	0.127	0.141	111	0.126	0.149	118	60-130

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