eurofins | Eaton Analytical

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)

A2LA ACCREDITED
CERTIFICATE #'s 5890.01 & 5890.02

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

NELAP ACCREDITED TNI LABORATORY
Utah ELCP CA00006

Date of Issue
03/18/2022
EUROFINS EATON ANALYTICAL, LLC

DEB: Debbie L Frank
Project Manager

Report: 986280
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

* Accredited in accordance with TNI 2016 and ISO/IEC 17025:2017.
* Laboratory certifies that the test results meet all **TNI 2016 and ISO/IEC 17025:2017** requirements unless noted under the individual analysis.
* As applicable, this report consists of the cover page, State Certification List, ISO 17025 Accredited Method List, Acknowledgement of Samples Received, Comments, Hits Report, Data Report, QC Summary, QC Report and Regulatory Forms.
* Test results relate only to the sample(s) tested.
* Test results apply to the sample(s) as received, unless otherwise noted in the comments report (ISO/IEC 17025:2017).
* This report shall not be reproduced except in full, without the written approval of the laboratory.
* This report includes ISO/IEC 17025 and non-ISO 17025 accredited methods.

STATE CERTIFICATION LIST

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

* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

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

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

https://www.eurofinsus.com/Eaton

Test(s)	Method(s)	Potable Water *	Waste Water
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/Microcystin	+ 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 Disinfection 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

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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 #: 986280
Project: RED-HILL
Sample Group: Red-Hill Expanded List (Albuquerque+)
Project Manager: Debbie L Frank
Phone: (626) 386-1149
PO #: C20525101 exp 05312023

The following samples were received from you on **February 09, 2022** at **1505**. 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
202202090890	MOANALUA WELLS (331-223-TP202)	02/07/2022 1038
	(SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	
202202090891	TRAVEL BLANK::MOANALUA WELLS (331-223-TP202)	02/07/2022 1038
	(SUB)Gas Fraction Hydrocarbons	

Test Description

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CHAIN OF CUSTODY RECORD

480780

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

Phone: 626 386 1100
Fax: 626 386 1101

800 566 LABS (800 566 5227)

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED AGAINST COC BY: (B)

SAMPLES LOGGED IN BY: (C)

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

SAMPLE TEMP RECEIVED AT:

[ ] Colton / No. California / Arizona _____ °C (Compliance: 4 ± 2 °C)

[X] Monrovia 4.6 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen X Partially Frozen _____ Thawed _____ Wet Ice _____ No Ice _____

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

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME:	PROJECT CODE:	COMPLIANCE SAMPLES (check for yes)	NON-COMPLIANCE SAMPLES (check for yes)
HONOLULU BOARD OF WATER SUPPLY	RED HILL-Weekly	- Requires state forms [ ]	X

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

REGULATION INVOLVED: _____

EEA CLIENT CODE:	COC ID:	SAMPLE GROUP:
		1Q2022

SEE ATTACHED BOTTLE ORDER FOR ANALYSES [X] (check for yes), *OR*

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

TAT requested: RUSH STD__ 1 wk ___ 3 day ___ 2 day ___ 1 day ___

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX *	FIELD DATA	FIELD DATA	Red Hill															SAMPLER COMMENTS
2/7/22	1038	Moanalua Wells	HI0000331-223	CFW			X															

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:		E Juagdan	BWS HONOLULU	2/7/22	1038
RELINQUISHED BY:		E Juagdan	BWS HONOLULU	2/8/22	1200
RECEIVED BY:	Chun Brooks	Chun Brooks	EAA	2.9.22	1505
RELINQUISHED BY:					
RECEIVED BY:					

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

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

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

Created Date & Time: 1/3/2022 12:06:54AM

Note: Sampler Please return this paper with your samples

Kit #: 309379

Client ID: HONOLULU

Created By: - [AutoGenerated]
Deliver By: 02/02/2022
STG: Bottle Orders
Ice Type: G
Pre Registered

Project Code: RED-HILL Bottle Orders
Group Name: Red-Hill Expanded List (Albuquerque+)
PO#/JOB#: C20525101 exp 05312023
Description: MOANALUA WELLS - ended 0127

Ship Sample Kits to
Honolulu Board of Water Supply
630 South Beretania Street
Chemistry Lab
Honolulu, HI 96843

Attn: Ron Fenstemacher
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 - 1L amber glass [1 ml Thio 8%]	9	
1	8015 Gas_C	3 - 40ml amber glass vial [1 drop Thio (8%)]	3	
1	@504MOD TB C, 8015 Gas_C TB	2 - 40ml amber glass vial [1 drop Thio (8%) + H20]	2	
1	@VOASDWA C plus plus TICs TBC	3 - 40ml amber glass vial [25mg AA+ H20+10 drop 1:1 HCL]	3	UN1789

Sum Tests: 4

Sum Bottles: 17

Comments

3rd MS/MSD

SITE ID:
MOANALUA WELLS (331-223 -TP202)

SAMPLER:
Eight 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Nine 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES. THIS IS A MS/MSD 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 Contaienr 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

Code	Status	Date Shipped	Via	Tracking #	# of Coolers	Prepared By

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INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 9320780

SAMPLE TEMP RECEIVED:

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

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 4.8 °C) (Corr.Factor -0.2 °C) (Final = 4.6 °C)

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

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx (circled) / 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, Anatoxin, LCMS methods using 40 ml vials, International clients:

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

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	Chris Brock	Eurofins Eaton Analytical	2-9-22	1505
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

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INTERNAL CHAIN OF COSTODY RECORD

EEA Folder Number: 986780

SAMPLE TEMP RECEIVED:

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

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 6.0 °C) (Corr.Factor 0.2 °C) (Final = 5.8 °C)

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

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

Compliance Acceptance Criteria:

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

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

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

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

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

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

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

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

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

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

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

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

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[signature]	Chun Brooch	Eurofins Eaton Analytical	2-9-22	1510
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

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INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 986780

SAMPLE TEMP RECEIVED:

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

SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 401 (Observation= 6.1 °C) (Corr.Factor -0.2 °C) (Final = 5.9 °C)

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

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

Compliance Acceptance Criteria:

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

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

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

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

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

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

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

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

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

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

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

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

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	Chm Brock	Chm Brock	Eurofins Eaton Analytical	2.9.22	1501
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

QA FO-FRM5504 (9.28.21) Ver 9

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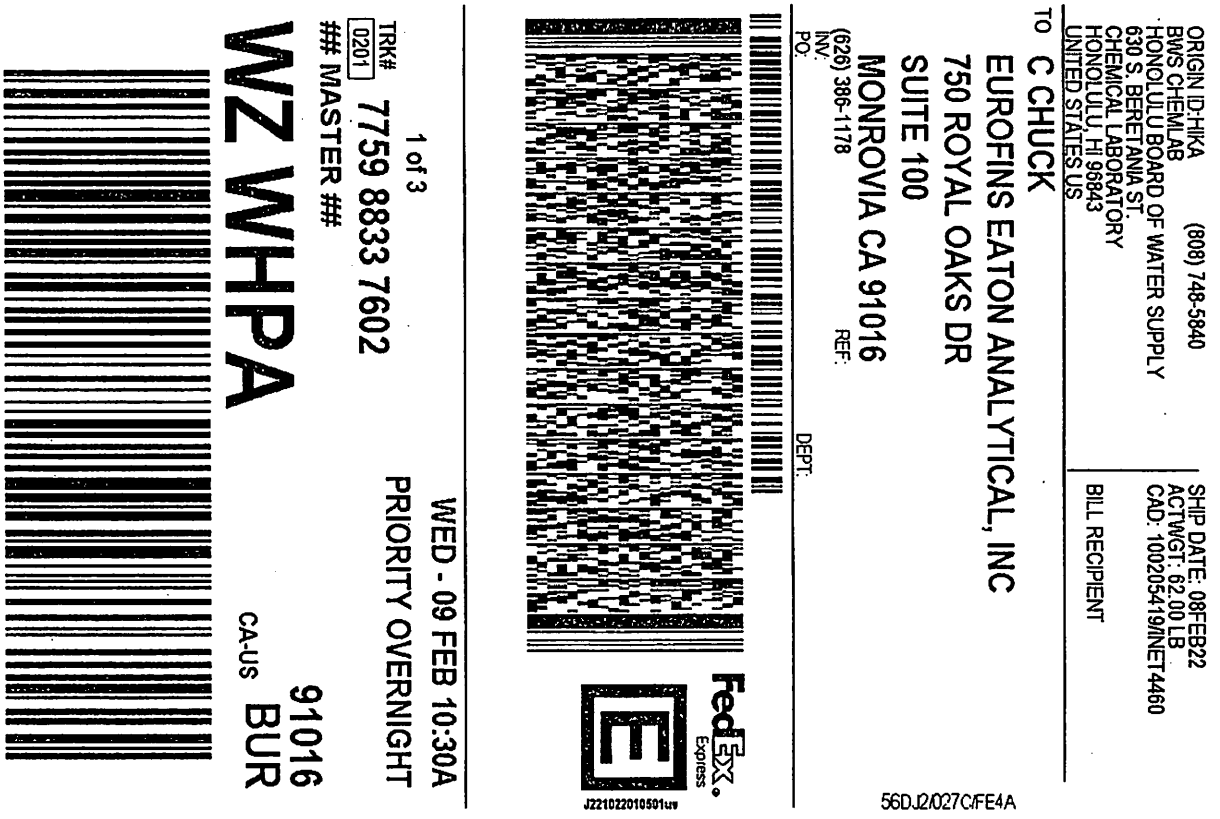

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3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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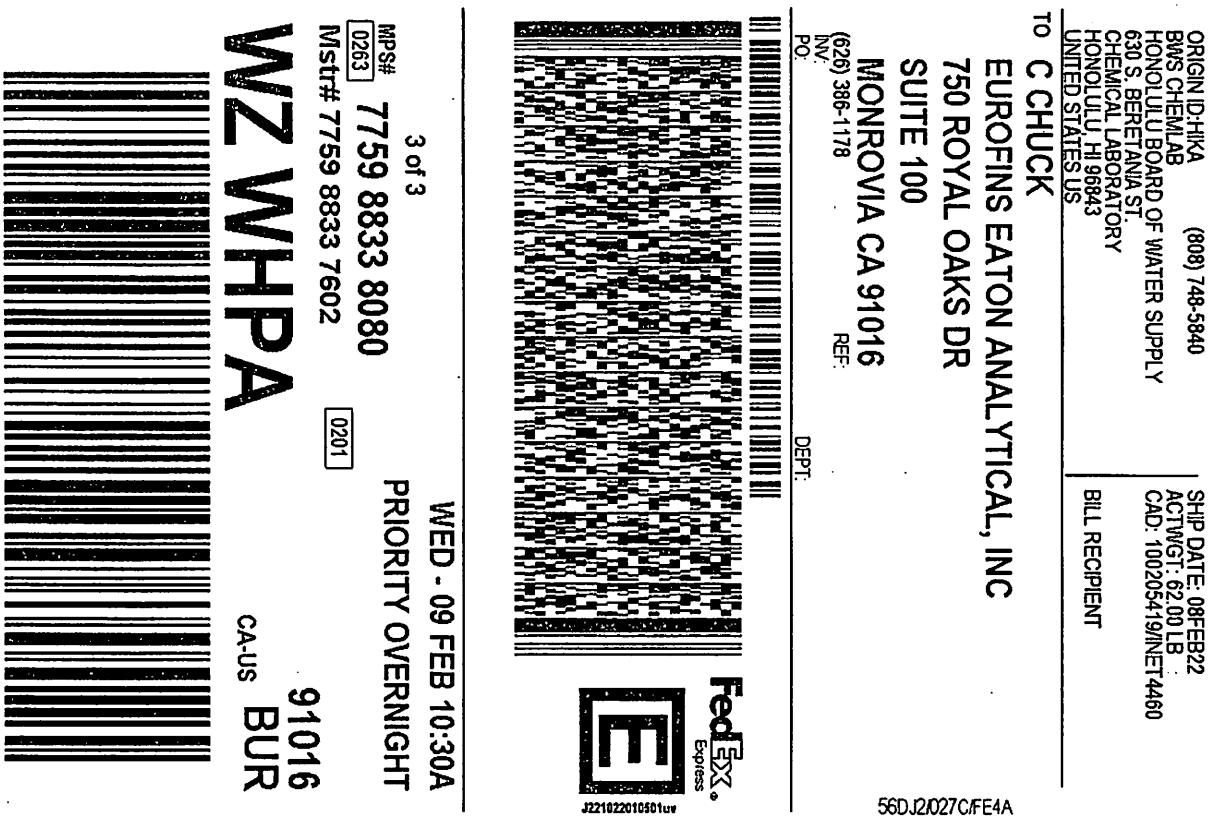
Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you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



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

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

eurofins | Eaton Analytical

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

Laboratory Comments

Report: 986280
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

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

Folder Comments

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

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

eurofins | Eaton Analytical

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

Laboratory Hits

Report: 986280
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

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

Samples Received on:
02/09/2022 1505

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

eurofins | Eaton Analytical

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

Laboratory Data

Report: 986280
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

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

Samples Received on:
02/09/2022 1505

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
MOANALUA WELLS (331-223-TP202) (202202090890)							**Sampled on 02/07/2022 1038**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
02/10/22	02/10/22 22:03			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
				SW 8015B - TPH 8015 Diesel and Motor Oil					
02/10/22	02/14/22 17:14			(SW 8015B)	TPH Diesel	ND	mg/L	0.025	1
02/10/22	02/14/22 17:14			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.049	1
				EPA 8015 - Jet Fuel 5 C8-C18					
02/10/22	02/14/22 17:14			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.049	1
				EPA 8015 - Jet Fuel 8 C8-C18					
	02/14/22 17:14			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.049	1
TRAVEL BLANK::MOANALUA WELLS (331-223-TP202) (202202090891)							**Sampled on 02/07/2022 1038**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
02/10/22	02/10/22 21:27			(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.

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

Date: 02-16-2022
EMAX Batch No.: 22B109

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 986280

Enclosed is the Laboratory report for samples received on 02/10/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202202090890	B109-01	02/07/22	WATER	TPH
				TPH GASOLINE
202202090891	B109-02	02/07/22	WATER	TPH GASOLINE
202202090890MS	B109-01M	02/07/22	WATER	TPH
				TPH GASOLINE
202202090890MSD	B109-01S	02/07/22	WATER	TPH
				TPH GASOLINE

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang
Laboratory Director

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

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

eurofins | Eaton Analytical

Ship To:
`EMAX Laboratories, Inc.
3051 Fujita St.

Torrance, CA 90505

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

Folder #: 986280 **Report Due:** 02/14/2022

Submittal Form 22B109

Date: 2/10/2022

*REPORTING REQUIRMENTS: *Do Not Combine Reports with any other samples submitted under different Folder Numbers!*
Report & Invoice must have the Folder # **986280** 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@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

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

Samples from: **HAWAII**

2-3 day rush
RED Hill

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
202202090890 (1)	MOANALUA WELLS (331-223-TP202)	02/07/22 1038	DW			JLS

Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID:

Method	Prep Method	Analysis Requested
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

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
202202090891 (2)	TRAVEL BLANK: MOANALUA WELLS (331-223-TP202)	02/07/22 1038	DW			JLS

Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID:

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

Relinquished by: [signature] Sample Control Date 2/10/22 Time 1211

Received by: _____ Date _____ Time _____

Relinquished by: Sample Control Date _____ Time _____

Received by: [signature] Date 2/10/22 Time 12:11

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp, 3.8/3.3 (0), 5.2/4.7 (2), 1.8/1.3 (3)

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 22B109
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient Maria Rivera
☐ EMAX Courier ☒ Client Delivery		Date 02/10/22 Time 12:11

COC INSPECTION

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

Note:

PACKAGING INSPECTION

Container	*correction Factor -0.5 ☒ Cooler	☐ Box	☐ Other		
Condition	☒ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool, ≤6 °C but not frozen)	☒ Cooler 1 3.8/3.3 °C	☒ Cooler 2 5.2/4.7 °C	☒ Cooler 3 1.8/1.3 °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Thermometer:	A - S/N ~~210191066~~ a 14/14	B - S/N 210271396	(C) - S/N 210271399	D - S/N _____	

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

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1	4-12	D22		R8

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. RB 2/11/22

NOTES/OBSERVATIONS:

LEGEND:

☐ **Continue to next page.**

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
(D22)	Jet Fuel 8 Analysis not indicated on label
D23	
D24	

Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	Informed Client.
R9	
R10	
R11	
R12	

REVIEWS:

Sample Labeling: maria rivera | Jocelyn Solis-Ramos
Date: 02/10/22 | 02/10/22

SRF
Date: 02/10/22

PM: RB
Date: 2/11/22

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

986280

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

SDG#: 22B109

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 986280

SDG : 22B109

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

A total of two(2) water samples were received on 02/10/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

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

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39B07B - 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. VG39B07L/VG39B07C 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 B109-01M/B109-01S. 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 : 986280

SDG NO. : 22B109
Instrument ID : GCT039

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VG39B07B	1	NA	02/10/2217:47	02/10/2217:47	EB10005A	EB10003A	22VG39B07	Method Blank
LCS1W	VG39B07L	1	NA	02/10/2218:24	02/10/2218:24	EB10006A	EB10003A	22VG39B07	Lab Control Sample (LCS)
LCD1W	VG39B07C	1	NA	02/10/2219:01	02/10/2219:01	EB10007A	EB10003A	22VG39B07	LCS Duplicate
202202090891	B109-02	1	NA	02/10/2221:27	02/10/2221:27	EB10011A	EB10003A	22VG39B07	Field Sample
202202090890	B109-01	1	NA	02/10/2222:03	02/10/2222:03	EB10012A	EB10003A	22VG39B07	Field Sample
202202090890MS	B109-01M	1	NA	02/10/2222:40	02/10/2222:40	EB10013A	EB10003A	22VG39B07	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/10/2223:16	02/10/2223:16	EB10014A	EB10003A	22VG39B07	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 22:03
Sample ID	: 202202090890	Date Analyzed:	02/10/22 22:03
Lab Samp ID:	B109-01	Dilution Factor:	1
Lab File ID:	EB10012A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0321	0.0400	80	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:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 21:27
Sample ID	: 202202090891	Date Analyzed:	02/10/22 21:27
Lab Samp ID:	B109-02	Dilution Factor:	1
Lab File ID:	EB10011A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0313	0.0400	78	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:	02/10/22 17:47
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 17:47
Sample ID	: MBLK1W	Date Analyzed:	02/10/22 17:47
Lab Samp ID:	VG39B07B	Dilution Factor:	1
Lab File ID:	EB10005A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0328	0.0400	82	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 : 986280
BATCH NO. : 22B109
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VG39B07B	VG39B07L	VG39B07C
LAB FILE ID	: EB10005A	EB10006A	EB10007A
DATE PREPARED	: 02/10/22 17:47	02/10/22 18:24	02/10/22 19:01
DATE ANALYZED	: 02/10/22 17:47	02/10/22 18:24	02/10/22 19:01
PREP BATCH	: 22VG39B07	22VG39B07	22VG39B07
CALIBRATION REF	: EB10003A	EB10003A	EB10003A

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	0.573	115	0.500	0.540	108	6	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0445	111	0.0400	0.0431	108	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 : 986280
BATCH NO. : 22B109
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: B109-01	B109-01M	B109-01S
LAB FILE ID	: EB10012A	EB10013A	EB10014A
DATE PREPARED	: 02/10/22 22:03	02/10/22 22:40	02/10/22 23:16
DATE ANALYZED	: 02/10/22 22:03	02/10/22 22:40	02/10/22 23:16
PREP BATCH	: 22VG39B07	22VG39B07	22VG39B07
CALIBRATION REF	: EB10003A	EB10003A	EB10003A

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	0.548	110	0.500	0.537	107	2	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0435	109	0.0400	0.0437	109	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

986280

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22B109

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J5B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B109-01M/22B109-01S. 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: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J5B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B109-01M/22B109-01S. 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: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J8B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22B109-01M/22B109-01S. 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
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	DSB014WL	1	NA	02/14/2215:05	02/10/2215:30	LB14010A	LB14003A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14003A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14003A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2217:32	02/10/2215:30	LB14018A	LB14003A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2217:51	02/10/2215:30	LB14019A	LB14003A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	J5B014WL	1	NA	02/14/2215:23	02/10/2215:30	LB14011A	LB14004A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14004A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14004A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2218:09	02/10/2215:30	LB14020A	LB14004A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2218:28	02/10/2215:30	LB14021A	LB14004A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	J8B014WL	1	NA	02/14/2215:42	02/10/2215:30	LB14012A	LB14005A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14005A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14005A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2218:46	02/10/2215:30	LB14022A	LB14005A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2219:04	02/10/2215:30	LB14023A	LB14005A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14003A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.012
Motor Oil	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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	: 1020ml	Final Volume :	5ml
Prepared by	: JMuert	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14004A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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 : 1020ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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 : 1020ml 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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14003A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	DSB014WL
LAB FILE ID	: LB14013A	LB14010A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:05
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14003A	LB14003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.42	97	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.477	95	60-130
Hexacosane	0.125	0.126	101	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14018A	LB14019A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 17:32	02/14/22 17:51
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14003A	LB14003A	LB14003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRcc (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.65	2.95	111	2.60	2.82	108	5	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.530	0.524	99	0.520	0.480	92	60-130
Hexacosane	0.132	0.125	94	0.130	0.120	92	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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14004A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	J5B014WL
LAB FILE ID	: LB14013A	LB14011A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:23
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14004A	LB14004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	1.99	80	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.510	102	60-130
Hexacosane	0.125	0.123	98	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14020A	LB14021A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 18:09	02/14/22 18:28
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14004A	LB14004A	LB14004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.62	2.25	86	2.62	1.85	70	20	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.525	0.559	106	0.525	0.476	91	60-130
Hexacosane	0.131	0.108	82	0.131	0.111	85	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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14005A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	J8B014WL
LAB FILE ID	: LB14013A	LB14012A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:42
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14005A	LB14005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	1.63	65	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.461	92	60-130
Hexacosane	0.125	0.114	91	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14022A	LB14023A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 18:46	02/14/22 19:04
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14005A	LB14005A	LB14005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.65	1.95	74	2.62	2.16	82	10	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.530	0.558	105	0.525	0.525	100	60-130
Hexacosane	0.132	0.130	98	0.131	0.115	88	60-130

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

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

Date: 02-16-2022
EMAX Batch No.: 22B109

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 986280

Enclosed is the Laboratory report for samples received on 02/10/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202202090890	B109-01	02/07/22	WATER	TPH
				TPH GASOLINE
202202090891	B109-02	02/07/22	WATER	TPH GASOLINE
202202090890MS	B109-01M	02/07/22	WATER	TPH
				TPH GASOLINE
202202090890MSD	B109-01S	02/07/22	WATER	TPH
				TPH GASOLINE

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang
Laboratory Director

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

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

eurofins | Eaton Analytical

Ship To:
`EMAX Laboratories, Inc.
3051 Fujita St.

Torrance, CA 90505

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

Folder #: 986280 **Report Due:** 02/14/2022

Submittal Form 22B109

Date: 2/10/2022

*REPORTING REQUIRMENTS: *Do Not Combine Reports with any other samples submitted under different Folder Numbers!*
Report & Invoice must have the Folder # **986280** 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@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

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

Samples from: **HAWAII**

2-3 day rush
RED Hill

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
202202090890 (1)	MOANALUA WELLS (331-223-TP202)	02/07/22 1038	DW			JLS

Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID:

Method	Prep Method	Analysis Requested
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

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
202202090891 (2)	TRAVEL BLANK: MOANALUA WELLS (331-223-TP202)	02/07/22 1038	DW			JLS

Sample type: | Sample Event: | Facility ID: | Sample Point ID: | Static ID:

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

Relinquished by: [signature] Sample Control Date 2/10/22 Time 1211

Received by: _____ Date _____ Time _____

Relinquished by: Sample Control Date _____ Time _____

Received by: [signature] Date 2/10/22 Time 12:11

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp, 3.8/3.3 (0), 5.2/4.7 (2), 1.8/1.3 (3)

SAMPLE RECEIPT FORM 1

Type of Delivery	Airbill / Tracking Number	ECN 22B109
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient Maria Rivera
☐ EMAX Courier ☒ Client Delivery		Date 02/10/22 Time 12:11

COC INSPECTION

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

Note:

PACKAGING INSPECTION

Container	*correction Factor -0.5 ☒ Cooler	☐ Box	☐ Other		
Condition	☒ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ _____
Temperatures (Cool, ≤6 °C but not frozen)	☒ Cooler 1 3.8/3.3 °C	☒ Cooler 2 5.2/4.7 °C	☒ Cooler 3 1.8/1.3 °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C
Thermometer:	A - S/N ~~210191066~~ @ 14/14	B - S/N 210271396	(C) - S/N 210271399	D - S/N _____	

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

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1	4-12	D22		R8

☐ pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. RB 2/11/22

NOTES/OBSERVATIONS:

LEGEND:

☐ **Continue to next page.**

Code	Description- Sample Management
D1	Analysis is not indicated in _____
D2	Analysis mismatch COC vs label
D3	Sample ID mismatch COC vs label
D4	Sample ID is not indicated in _____
D5	Container -[improper] [leaking] [broken]
D6	Date/Time is not indicated in _____
D7	Date/Time mismatch COC vs label
D8	Sample listed in COC is not received
D9	Sample received is not listed in COC
D10	No initial/date on corrections in COC/label
D11	Container count mismatch COC vs received
D12	Container size mismatch COC vs received

Code	Description-Sample Management
D13	Out of Holding Time
D14	Bubble is >6mm
D15	No trip blank in cooler
D16	Preservation not indicated in _____
D17	Preservation mismatch COC vs label
D18	Insufficient chemical preservative
D19	Insufficient Sample
D20	No filtration info for dissolved analysis
D21	No sample for moisture determination
(D22)	Jet Fuel 8 Analysis not indicated on label
D23	
D24	

Code	Description-Sample Management
R1	Proceed as indicated in ☐ COC ☐ Label
R2	Refer to attached instruction
R3	Cancel the analysis
R4	Use vial with smallest bubble first
R5	Log-in with latest sampling date and time+1 min
R6	Adjust pH as necessary
R7	Filter and preserved as necessary
R8	Informed Client.
R9	
R10	
R11	
R12	

REVIEWS:

	Sample Labeling	SRF	PM
	maria rivera / Jocelyn Gallegos		RB
Date	02/10/22 / 02/10/22	02/10/22	2/11/22

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

986280

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

SDG#: 22B109

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 986280

SDG : 22B109

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

A total of two(2) water samples were received on 02/10/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

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

Method Blank
Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. VG39B07B - 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. VG39B07L/VG39B07C 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 B109-01M/B109-01S. 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 : 986280

SDG NO. : 22B109
Instrument ID : GCT039

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VG39B07B	1	NA	02/10/2217:47	02/10/2217:47	EB10005A	EB10003A	22VG39B07	Method Blank
LCS1W	VG39B07L	1	NA	02/10/2218:24	02/10/2218:24	EB10006A	EB10003A	22VG39B07	Lab Control Sample (LCS)
LCD1W	VG39B07C	1	NA	02/10/2219:01	02/10/2219:01	EB10007A	EB10003A	22VG39B07	LCS Duplicate
202202090891	B109-02	1	NA	02/10/2221:27	02/10/2221:27	EB10011A	EB10003A	22VG39B07	Field Sample
202202090890	B109-01	1	NA	02/10/2222:03	02/10/2222:03	EB10012A	EB10003A	22VG39B07	Field Sample
202202090890MS	B109-01M	1	NA	02/10/2222:40	02/10/2222:40	EB10013A	EB10003A	22VG39B07	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/10/2223:16	02/10/2223:16	EB10014A	EB10003A	22VG39B07	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 22:03
Sample ID	: 202202090890	Date Analyzed:	02/10/22 22:03
Lab Samp ID:	B109-01	Dilution Factor:	1
Lab File ID:	EB10012A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0321	0.0400	80	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:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 21:27
Sample ID	: 202202090891	Date Analyzed:	02/10/22 21:27
Lab Samp ID:	B109-02	Dilution Factor:	1
Lab File ID:	EB10011A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0313	0.0400	78	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:	02/10/22 17:47
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 17:47
Sample ID	: MBLK1W	Date Analyzed:	02/10/22 17:47
Lab Samp ID:	VG39B07B	Dilution Factor:	1
Lab File ID:	EB10005A	Matrix:	WATER
Ext Btch ID:	22VG39B07	% Moisture:	NA
Calib. Ref.:	EB10003A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0328	0.0400	82	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 : 986280
BATCH NO. : 22B109
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VG39B07B	VG39B07L	VG39B07C
LAB FILE ID	: EB10005A	EB10006A	EB10007A
DATE PREPARED	: 02/10/22 17:47	02/10/22 18:24	02/10/22 19:01
DATE ANALYZED	: 02/10/22 17:47	02/10/22 18:24	02/10/22 19:01
PREP BATCH	: 22VG39B07	22VG39B07	22VG39B07
CALIBRATION REF:	EB10003A	EB10003A	EB10003A

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	0.573	115	0.500	0.540	108	6	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0445	111	0.0400	0.0431	108	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 : 986280
BATCH NO. : 22B109
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: B109-01	B109-01M	B109-01S
LAB FILE ID	: EB10012A	EB10013A	EB10014A
DATE PREPARED	: 02/10/22 22:03	02/10/22 22:40	02/10/22 23:16
DATE ANALYZED	: 02/10/22 22:03	02/10/22 22:40	02/10/22 23:16
PREP BATCH	: 22VG39B07	22VG39B07	22VG39B07
CALIBRATION REF	: EB10003A	EB10003A	EB10003A

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	0.548	110	0.500	0.537	107	2	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0435	109	0.0400	0.0437	109	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

986280

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22B109

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J5B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B109-01M/22B109-01S. 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: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J5B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B109-01M/22B109-01S. 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: 986280

SDG : 22B109

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/10/22 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. DSB014WB - 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 J8B014WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22B109-01M/22B109-01S. 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
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	DSB014WL	1	NA	02/14/2215:05	02/10/2215:30	LB14010A	LB14003A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14003A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14003A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2217:32	02/10/2215:30	LB14018A	LB14003A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2217:51	02/10/2215:30	LB14019A	LB14003A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	J5B014WL	1	NA	02/14/2215:23	02/10/2215:30	LB14011A	LB14004A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14004A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14004A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2218:09	02/10/2215:30	LB14020A	LB14004A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2218:28	02/10/2215:30	LB14021A	LB14004A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 986280

SDG NO. : 22B109
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
LCS1W	J8B014WL	1	NA	02/14/2215:42	02/10/2215:30	LB14012A	LB14005A	22DSB014W	Lab Control Sample (LCS)
MBLK1W	DSB014WB	1	NA	02/14/2216:00	02/10/2215:30	LB14013A	LB14005A	22DSB014W	Method Blank
202202090890	B109-01	1	NA	02/14/2217:14	02/10/2215:30	LB14017A	LB14005A	22DSB014W	Field Sample
202202090890MS	B109-01M	1	NA	02/14/2218:46	02/10/2215:30	LB14022A	LB14005A	22DSB014W	Matrix Spike Sample (MS)
202202090890MSD	B109-01S	1	NA	02/14/2219:04	02/10/2215:30	LB14023A	LB14005A	22DSB014W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14003A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.025	0.012
Motor Oil	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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	: 1020ml	Final Volume :	5ml
Prepared by	: JMuert	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14004A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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 : 1020ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/07/22 10:38
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: 202202090890	Date Analyzed:	02/14/22 17:14
Lab Samp ID:	22B109-01	Dilution Factor:	1
Lab File ID:	LB14017A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.049	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.400	0.490	82	60-130
Hexacosane	0.105	0.123	86	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 : 1020ml 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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14003A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	DSB014WL
LAB FILE ID	: LB14013A	LB14010A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:05
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14003A	LB14003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.42	97	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.477	95	60-130
Hexacosane	0.125	0.126	101	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14018A	LB14019A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 17:32	02/14/22 17:51
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14003A	LB14003A	LB14003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRcc (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.65	2.95	111	2.60	2.82	108	5	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.530	0.524	99	0.520	0.480	92	60-130
Hexacosane	0.132	0.125	94	0.130	0.120	92	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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14004A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	J5B014WL
LAB FILE ID	: LB14013A	LB14011A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:23
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14004A	LB14004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	1.99	80	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.510	102	60-130
Hexacosane	0.125	0.123	98	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14020A	LB14021A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 18:09	02/14/22 18:28
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14004A	LB14004A	LB14004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.62	2.25	86	2.62	1.85	70	20	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.525	0.559	106	0.525	0.476	91	60-130
Hexacosane	0.131	0.108	82	0.131	0.111	85	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:	02/10/22 15:30
Project	: 986280	Date Received:	02/10/22
Batch No.	: 22B109	Date Extracted:	02/10/22 15:30
Sample ID	: MBLK1W	Date Analyzed:	02/14/22 16:00
Lab Samp ID:	DSB014WB	Dilution Factor:	1
Lab File ID:	LB14013A	Matrix:	WATER
Ext Btch ID:	22DSB014W	% Moisture:	NA
Calib. Ref.:	LB14005A	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	0.386	0.500	77	60-130
Hexacosane	0.0970	0.125	78	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB014WB	J8B014WL
LAB FILE ID	: LB14013A	LB14012A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 16:00	02/14/22 15:42
PREP BATCH	: 22DSB014W	22DSB014W
CALIBRATION REF	: LB14005A	LB14005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	1.63	65	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.461	92	60-130
Hexacosane	0.125	0.114	91	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 986280
BATCH NO. : 22B109
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202090890	202202090890MS	202202090890MSD
LAB SAMPLE ID	: 22B109-01	22B109-01M	22B109-01S
LAB FILE ID	: LB14017A	LB14022A	LB14023A
DATE PREPARED	: 02/10/22 15:30	02/10/22 15:30	02/10/22 15:30
DATE ANALYZED	: 02/14/22 17:14	02/14/22 18:46	02/14/22 19:04
PREP BATCH	: 22DSB014W	22DSB014W	22DSB014W
CALIBRATION REF	: LB14005A	LB14005A	LB14005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.65	1.95	74	2.62	2.16	82	10	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.530	0.558	105	0.525	0.525	100	60-130
Hexacosane	0.132	0.130	98	0.131	0.115	88	60-130

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