

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

## Laboratory Report

for

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



Utah ELCP CA00006

DEB: Debbie L Frank  
Project Manager

Report: 981948  
Project: RED-HILL  
Group: Red-Hill Expanded List (Albuquerque+)

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

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

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

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

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

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

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

## STATE CERTIFICATION LIST

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

\* NELAP/TNI Recognized Accreditation Bodies

ISO/IEC 17025:2917 Accredited Method List

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

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

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

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

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

(+ ) In-House Method

### Acknowledgement of Samples Received

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

Attn: Erwin Kawata  
 Phone: 808-748-5091

Client ID: HONOLULU  
 Folder #: 981948  
 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 **January 20, 2022 at 1440**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using Eurofins Eaton Analytical, LLC.

Sample #	Sample ID	Sample Date
<u>202201200765</u>	MOANALUA WELLS (331-223-TP202)	01/18/2022 0845
	(SUB)Gas Fraction Hydrocarbons      TPH 8015 Diesel and Motor Oil      TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	
<u>202201200797</u>	TRAVEL BLANK::MOANALUA WELLS (331-223-TP202)	01/18/2022 0845
	(SUB)Gas Fraction Hydrocarbons	
<u>202201240084</u>	RUSH	01/18/2022 08:45
	RUSH	

### Test Description



Eaton Analytical

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

# CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY:

981948 GS

LOGIN COMMENTS: \_\_\_\_\_ SAMPLES CHECKED AGAINST COC BY: \_\_\_\_\_

SAMPLE TEMP RECEIVED AT: \_\_\_\_\_ SAMPLES LOGGED IN BY: \_\_\_\_\_

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

Monrovia      10 °C ( Compliance: 4 ± 2 °C )

CONDITION OF BLUE ICE: Frozen \_\_\_\_\_ Thawed \_\_\_\_\_ Wet Ice \_\_\_\_\_ No Ice \_\_\_\_\_

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

TO BE COMPLETED BY SAMPLER: \_\_\_\_\_ (check for yes)

COMPANY/AGENCY NAME: BWS HONOLULU		PROJECT CODE: Red Hill	COMPLIANCE SAMPLES - Requires state forms	NON-COMPLIANCE SAMPLES <input checked="" type="checkbox"/>
EEA CLIENT CODE: Honolulu	COC ID:	SAMPLE GROUP:	Type of samples (circle one):	SPECIAL CONFIRMATION (eg. SDWA, Phase V, NPDES, FDA,....)
TAT requested: rush by adv notice only		STD ___ 1 wk ___ X ___ 3 day ___ 2 day ___ 1 day ___	SEE ATTACHED BOTTLE ORDER FOR ANALYSES <input checked="" type="checkbox"/> (check for yes), OR	
SAMPLE DATE	SAMPLE ID	CLIENT LAB ID	list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)	
1-18-22 0815	MOANALUA WELLS	H10000331-223		
	Temperature Blank			
			Temp Blank: 17.0 °C	

\* MATRIX TYPES: RSW = Raw Surface Water    CFW = Chlor(am)inated Finished Water    SEAW = Sea Water    BW = Bottled Water    SO = Soil

RGW = Raw Ground Water    FW = Other Finished Water    WSW = Waste Water    SW = Storm Water    SL = Sludge

O = Other - Please Identify

SAMPLED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	<i>[Signature]</i>	Derek Dotson	Honolulu Board of Water Supply	1-18-2022	
RECEIVED BY:	<i>[Signature]</i>	Derek Dotson	Honolulu Board of Water Supply	1-18-2022	1200
RELINQUISHED BY:	<i>[Signature]</i>	Gustavo Sanchez	EEA	1-20-22	1440
RECEIVED BY:					



Eaton Analytical

# INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 981948

### 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 = 631 (Observation = 1.2 °C) (Corr.Factor = -0.2 °C) (Final = 1.0 °C)

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

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

### Compliance Acceptance Criteria:

- 1) Chemistry: >0, ≤6°C, not frozen (NELAP) (if received after 24 hrs of sample collection)
- 2) Microbiology, Distribution: < 10°C, not frozen (can be ≥10°C if received on ice the same day as sample collection, within 8 hours)
- 3) Microbiology, Surface Water: < 10°C (if received after 2 hours of sample collection)

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

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

- 4 Dioxin (1613 or 2,3,7,8 TCDD): must be between 0-4 °C, not frozen (if received after 24 hrs of sample collection)
- 5) pH Check. Manufacturer: \_\_\_\_\_ Lot Number: \_\_\_\_\_ pH strip type: 0 - 14 or \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_
- 6) Chlorine check. Manufacturer: Sansafe. Lot No.: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Results: \_\_\_\_\_

- 7) VOA and Radon  No Samples with Headspace:  Samples with Headspace (see below):
- Headspace:  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, 538, 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

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

SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	Gustavo Sanchez	Eurofins Eaton Analytical	1/20/22	1440
SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
		Eurofins Eaton Analytical		

Tracking: 7912-2472-9348 7912-2472 9726 - 95

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

Created Date & Time: 12/10/2021 9:13:49PM

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

Kit #: 307684

Client ID: HONOLULU

Created By: - [AutoGenerated]  
 Deliver By: 01/05/2022  
 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: HALAWA WELLS UNITS 1 & 2 - E1

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

**Send Report to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg, Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

**Billing Address**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg, Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
1	@625A_Physis-C, @625BN_Physis-C, @626PAH_Physis_TICS_G - 4 - 1L amber glass [ 1 ml Thio 9% ]	4	
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel_5_C, TPH 8015 Jet Fuel_8_C	6	
1	8015 Gas_C	3	
1	8015 Gas_C TB	2	
1	@VOASDWA_C plus plus TICs TBG	3	UN4789
1	@VOASDWA_C plus plus TICs C	3	UN4789
1	@8045 Ethanol_Subbed	3	
<b>Sum Tests: 7</b>		<b>Sum Bottles: 24</b>	

**Comments**

SITE ID:  
 HALAWA WELLS (331-206-TP065)  
 SAMPLER:  
 FOUR 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND SIX 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES.  
 SHIPPING:  
 Travel Blanks - TBAMTBE, VOASDWA - Prepare TBs in the VOA LAB.  
 Label Cooler on TOP and right below both Handles with Site description of contents ( use extra Container Labels)

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

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

Created Date & Time: 12/10/2021 9:13:39PM

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

Kit #: 307683

Client ID: HONOLULU



Created By: - [AutoGenerated]

Deliver By: 01/05/2022

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: AIEA WELLS PUMPS 1&2 (260) - 1

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

**Send Report to**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

**Billing Address**  
 Honolulu Board of Water Supply  
 630 South Beretania Street  
 Public Service Bldg. Room 308  
 Honolulu, HI 96843  
 Attn: Erwin Kawata  
 Phone: 808-748-5091  
 Fax: 808-550-5018

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
1	<del>@625A_Physis_C_@625BN_Physis_C_4 - 1L amber glass [ 1 ml Thio 8% ]</del>	<del>4</del>	
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C	6	
1	8015 Gas_C	3	
1	8015 Gas_C TB	2	
1	@VOASDWA_C plus Thio TICs TB	3	UN1789
1	@VOASDWA_C plus plus TICs_C	3	UN1789
1	@8046 Ethanol Subbed	3	
<b>Sum Tests: 7</b>		<b>Sum Bottles: 24</b>	

**Comments**

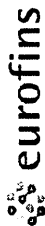
AIEA WELLS PUMPS 1&2 (260) (331-203-TP400)

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

**SHIPPING:**  
 Travel Blanks - 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 Containr Labels)

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





Eaton Analytical

### Kit Order for Honolulu Board of Water Supply

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: 12/10/2021 9:13:59PM

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

Client ID: HONOLULU

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

Kit #: 307685

Created By: - [AutoGenerated]  
Deliver By: 01/05/2022  
STG: Bottle Orders  
Ice Type: G

Pre Registered

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

**Send Report to**  
Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg., Room 308  
Honolulu, HI 96843  
Attn: Erwin Kawata  
Phone: 808-748-5091  
Fax: 808-550-5018

**Billing Address**  
Honolulu Board of Water Supply  
630 South Beretania Street  
Public Service Bldg., Room 308  
Honolulu, HI 96843  
Attn: Erwin Kawata  
Phone: 808-748-5091  
Fax: 808-550-5018

# of Sample Tests	Bottle Qty - Type [ preservative information ]	Total	UN DOT #
4	<del>@625A-Physis C, @625BN-Physis-G, @625PAH-Physis-HGS-C</del> 8 - 1L amber glass [ 1 ml Thio 8% ]	8	
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C	9	
1	8015 Gas_C	3	
1	8015 Gas_C TB	2	
4	@VOASDWA-G plus plus HGS-TBC	3	UN1789-
4	@VOASDWA-C plus plus HGS-C	3	UN1789-
1	@8045 Ethanol Subbed	4	
<b>Sum Tests: 7</b>		<b>Sum Bottles: 32</b>	

#### 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 Containr 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

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

**Laboratory Comments**

**Report:** 981948  
**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 8015 Gas, TPH Diesel, Motor Oil and Jet Fuels are submitted by Emax Laboratories

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

**Report:** 981948  
**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:  
01/20/2022 1440

---

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

---

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

Laboratory Data

**Report:** 981948  
**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:  
 01/20/2022 1440

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<b><u>MOANALUA WELLS (331-223-TP202) (202201200765)</u></b>						<b>Sampled on 01/18/2022 0845</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
01/21/22	01/21/22 14:12			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<b>SW 8015B - TPH 8015 Diesel and Motor Oil</b>									
01/24/22	01/25/22 14:53			(SW 8015B)	TPH Diesel	ND	mg/L	0.024	1
01/24/22	01/25/22 14:53			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.047	1
<b>EPA 8015 - Jet Fuel 5 C8-C18</b>									
01/24/22	01/25/22 14:53			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.047	1
<b>EPA 8015 - Jet Fuel 8 C8-C18</b>									
	01/25/22 14:53			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.047	1
<b><u>TRAVEL BLANK::MOANALUA WELLS (331-223-TP202) (202201200797)</u></b>						<b>Sampled on 01/18/2022 0845</b>			
<b>SW 8015B - (SUB)Gas Fraction Hydrocarbons</b>									
01/21/22	01/21/22 16:02			(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.



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

Date: 02-01-2022  
EMAX Batch No.: 22A207

Attn: Jackie Contreras

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

Subject: Laboratory Report  
Project: 981948

Enclosed is the Laboratory report for samples received on 01/21/22.  
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202201200765	A207-01	01/18/22	WATER	TPH GASOLINE TPH
202201200797	A207-02	01/18/22	WATER	TPH GASOLINE
202201200765MS	A207-01M	01/18/22	WATER	TPH GASOLINE TPH DIESEL
202201200765MSD	A207-01S	01/18/22	WATER	TPH GASOLINE TPH DIESEL

The results are summarized on the following pages.

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

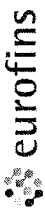
Sincerely yours,

Caspar J. Pang  
Laboratory Director

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

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

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



Eaton Analytical

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

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

Folder #: 981948 Report Due: 01/25/2022

Sample ID: 202201200765 Client Sample ID for reference on/ MOANALUA WELLS (331-223-TP202)

Sample type: Sample Event: Analysis Requested

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

Sample ID: 202201200797 Client Sample ID for reference on/ TRAVEL BLANK: MOANALUA WELLS (331-223-TP202)

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

Relinquished by: *AM* Sample Control

Date: 1/21/22 Time: 11:28

Received by: *AM*

Date: 1/21/22 Time: 11:28

Relinquished by: Sample Control

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp: 1.6°

### Submittal Form

Date: 1/21/2022

22A207

\*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers!

Report & Invoice must have the Folder# 981948 Job # 1000014

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

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

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

3 day rush

Sample Date & Time Matrix 01/18/22 0845 DW Clip Code PWSID JLS

Sample Point ID: Static ID:

Sample Date & Time Matrix 01/18/22 0845 DW Clip Code PWSID JLS

Sample Point ID: Static ID:

Type of Delivery <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others	Airbill / Tracking Number	ECN <u>22A207</u>
<input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery		Recipient <u>AJAN RAMOS</u>
		Date <u>01/21/22</u> Time <u>11:20</u>

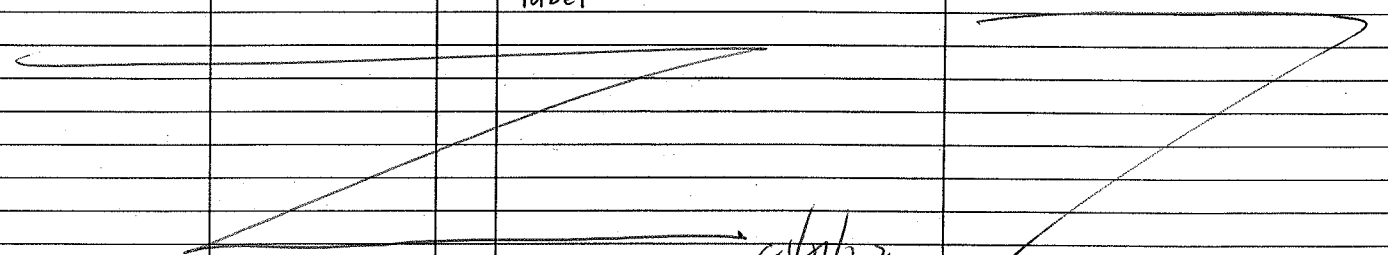
**COC INSPECTION**

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

**PACKAGING INSPECTION**

Container	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> Other
Condition	<input type="checkbox"/> Custody Seal	<input type="checkbox"/> Intact	<input type="checkbox"/> Damaged
Packaging	<input checked="" type="checkbox"/> Bubble Pack	<input type="checkbox"/> Styrofoam	<input type="checkbox"/> Popcorn
Temperatures (Cool, ≤6 °C but not frozen)	<input checked="" type="checkbox"/> Cooler 1 <u>1.6</u> °C	<input type="checkbox"/> Cooler 2 _____ °C	<input type="checkbox"/> Cooler 3 _____ °C
	<input type="checkbox"/> Cooler 6 _____ °C	<input type="checkbox"/> Cooler 7 _____ °C	<input type="checkbox"/> Cooler 8 _____ °C
Thermometer:	A - S/N <u>210291066</u> on <u>1/4/22</u>	B - S/N <u>210271396</u>	C - S/N <u>210271399</u>
		D - S/N _____	
Comments: <input type="checkbox"/> Temperature is out of range. PM was informed IMMEDIATELY.			
Note: _____			

**DISCREPANCIES**

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
1	1-3	D22	analysis is not visible	R8
2	8-9	D7	label lists two dates - 1/4/22 and 01/10/22	R1
1	4-7	D2	Jet Fuel 8 is not indicated on label	R8
				

pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time. MB 1/24/22

NOTES/OBSERVATIONS:

---

**LEGEND:**

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

REVIEWS:

Sample Labeling <u>JOCERVA</u>	SRF <u>Cepitca</u>	PM <u>MB</u>
Date <u>01/21/22</u>	Date <u>1/21/22</u>	Date <u>1/24/22</u>

## REPORTING CONVENTIONS

### DATA QUALIFIERS:

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

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

### ACRONYMS AND ABBREVIATIONS:

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

### DATES

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



LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

981948

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

SDG#: 22A207

## CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 981948

SDG : 22A207

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

A total of two(2) water samples were received on 01/21/22 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. VG39A12B - 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. VG39A12L/VG39A12C 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 A207-01M/A207-01S. 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     : 981948
=====
SDG NO.    : 22A207
Instrument ID : GCT039
=====

```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis Date/Time	Extraction Date/Time	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
									WATER
202201200765	VG39A12B	1	NA	01/21/2205:02	01/21/2205:02	EA20032A	EA20023A	22VG39A12	Method Blank
202201200765WS	VG39A12L	1	NA	01/21/2205:39	01/21/2205:39	EA20033A	EA20023A	22VG39A12	Lab Control Sample (LCS)
202201200797	VG39A12C	1	NA	01/21/2206:15	01/21/2206:15	EA20034A	EA20023A	22VG39A12	LCS Duplicate
	A207-01	1	NA	01/21/2214:12	01/21/2214:12	EA20047A	EA20044A	22VG39A12	Field Sample
	A207-01W	1	NA	01/21/2214:48	01/21/2214:48	EA20048A	EA20044A	22VG39A12	Matrix Spike Sample (MS)
	A207-01S	1	NA	01/21/2215:25	01/21/2215:25	EA20049A	EA20044A	22VG39A12	MS Duplicate (MSD)
	A207-02	1	NA	01/21/2216:02	01/21/2216:02	EA20050A	EA20044A	22VG39A12	Field Sample

```

FN - Filename
% Moist - Percent Moisture

```

# SAMPLE RESULTS

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

=====  
Client : EUROFINS EATON ANALYTICAL Date Collected: 01/18/22 08:45  
Project : 981948 Date Received: 01/21/22  
Batch No. : 22A207 Date Extracted: 01/21/22 14:12  
Sample ID : 202201200765 Date Analyzed: 01/21/22 14:12  
Lab Samp ID: A207-01 Dilution Factor: 1  
Lab File ID: EA20047A Matrix: WATER  
Ext Btch ID: 22VG39A12 % Moisture: NA  
Calib. Ref.: EA20044A 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	0.0344	0.0400	86	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: 01/18/22 08:45
Project     : 981948                     Date Received: 01/21/22
Batch No.   : 22A207                     Date Extracted: 01/21/22 16:02
Sample ID   : 202201200797              Date Analyzed: 01/21/22 16:02
Lab Samp ID: A207-02                     Dilution Factor: 1
Lab File ID: EA20050A                    Matrix: WATER
Ext Btch ID: 22VG39A12                   % Moisture: NA
Calib. Ref.: EA20044A                    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	0.0327	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

# QC SUMMARIES

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

=====  
Client : EUROFINS EATON ANALYTICAL Date Collected: 01/21/22 05:02  
Project : 981948 Date Received: 01/21/22  
Batch No. : 22A207 Date Extracted: 01/21/22 05:02  
Sample ID : MBLK1W Date Analyzed: 01/21/22 05:02  
Lab Samp ID: VG39A12B Dilution Factor: 1  
Lab File ID: EA20032A Matrix: WATER  
Ext Btch ID: 22VG39A12 % Moisture: NA  
Calib. Ref.: EA20023A 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	0.0331	0.0400	83	60-140

Notes:

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

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



EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981948  
BATCH NO. : 22A207  
METHOD : 5030B/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID : VG39A12B	VG39A12L	VG39A12C
LAB FILE ID : EA20032A	EA20033A	EA20034A
DATE PREPARED : 01/21/22 05:02	01/21/22 05:39	01/21/22 06:15
DATE ANALYZED : 01/21/22 05:02	01/21/22 05:39	01/21/22 06:15
PREP BATCH : 22VG39A12	22VG39A12	22VG39A12
CALIBRATION REF: EA20023A	EA20023A	EA20023A

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	0.528	106	0.500	0.497	99	6	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0454	114	0.0400	0.0435	109	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 : 981948  
BATCH NO. : 22A207  
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202201200765                       202201200765MSD
LAB SAMPLE ID : A207-01                           A207-01S
LAB FILE ID  : EA20047A                           EA20048A
DATE PREPARED : 01/21/22 14:12                   01/21/22 14:48
DATE ANALYZED : 01/21/22 14:12                   01/21/22 14:48
PREP BATCH   : 22VG39A12                         22VG39A12
CALIBRATION REF: EA20044A                         EA20044A
=====
  
```

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	0.493	99	0.500	0.485	97	2	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0428	107	0.0400	0.0413	103	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

981948

METHOD 3520C/8015B  
PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22A207

## CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 981948

SDG : 22A207

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

One(1) water sample was received on 01/21/22 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

#### Holding Time

The sample was analyzed within the prescribed holding time.

#### Calibration

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

#### Method Blank

Method blank was prepared and analyzed at the frequency required by the project. For this SDG, one(1) method blank was analyzed. DSA017WB - result was compliant to project requirement. Refer to sample result summary form for details.

#### Lab Control Sample

Lab control sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) LCS was analyzed. Percent recovery for Diesel was within LCS QC limits in DSA017WL. Refer to LCS summary form for details.

#### Matrix QC Sample

Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. Diesel was within MS QC limits in 22A207-01M/22A207-01S. 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: 981948

SDG : 22A207

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

One(1) water sample was received on 01/21/22 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. DSA017WB - 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 J5A017WL. Refer to LCS summary form for details.

#### Matrix QC Sample

No matrix QC sample was provided on this SDG. One(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22A208-01M/22A208-01S. 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: 981948

SDG : 22A207

METHOD 3520C/8015B  
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 01/21/22 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. DSA017WB - 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 J8A017WL. Refer to LCS summary form for details.

Matrix QC Sample

No matrix QC sample was provided on this SDG. One(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22A208-03M/22A208-03S. 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 : 981948  
SDG NO. : 22A207  
Instrument ID : D5

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis Date/Time	Extraction Date/Time	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
					WATER				
MBLK1W	DSA017WB	1	NA	01/25/2213:41	01/24/2211:15	LA25011A	LA25004A	22DSA017W	Method Blank
LCS1W	DSA017WL	1	NA	01/25/2213:59	01/24/2211:15	LA25012A	LA25004A	22DSA017W	Lab Control Sample (LCS)
202201200765	A207-01	1	NA	01/25/2214:53	01/24/2211:15	LA25015A	LA25004A	22DSA017W	Field Sample
202201200765MS	A207-01M	1	NA	01/25/2215:11	01/24/2211:15	LA25016A	LA25004A	22DSA017W	Matrix Spike Sample (MS)
202201200765MSD	A207-01S	1	NA	01/25/2215:28	01/24/2211:15	LA25017A	LA25004A	22DSA017W	MS Duplicate (MSD)

FN - Filename  
% Moist - Percent Moisture

LAB CHRONICLE  
PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL
Project     : 981948
SDG NO.    : 22A207
Instrument ID : D5
=====
  
```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Prep.		Notes
							Data FN	Batch	
MBLK1W	DSA017WB	1	NA	01/25/2213:41	01/24/2211:15	LA25011A	LA25005A	22DSA017W	Method Blank
LCS1W	J5A017WL	1	NA	01/25/2214:17	01/24/2211:15	LA25013A	LA25005A	22DSA017W	Lab Control Sample (LCS)
202201200765	A207-01	1	NA	01/25/2214:53	01/24/2211:15	LA25015A	LA25005A	22DSA017W	Field Sample

```

=====
FN          - Filename
% Moist     - Percent Moisture
=====
  
```



LAB CHRONICLE  
PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL
Project     : 981948
=====
SDG NO.    : 22A207
Instrument ID : D5
=====

```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis		Extraction Date/Time	Sample		Calibration Prep.		Notes
				Date/Time	Date/Time		Data FN	Data FN	Batch	Batch	
	DSAO17WB	1	NA	01/25/22 13:41	01/24/22 11:15	LA25011A	LA25006A	22DSA017W	Method Blank		
	J8A017WL	1	NA	01/25/22 14:35	01/24/22 11:15	LA25014A	LA25006A	22DSA017W	Lab Control Sample (LCS)		
202201200765	A207-01	1	NA	01/25/22 14:53	01/24/22 11:15	LA25015A	LA25006A	22DSA017W	Field Sample		

FN - Filename  
% Moist - Percent Moisture

# SAMPLE RESULTS

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/18/22 08:45
Project    : 981948                      Date Received: 01/21/22
Batch No.  : 22A207                      Date Extracted: 01/24/22 11:15
Sample ID  : 202201200765                Date Analyzed: 01/25/22 14:53
Lab Samp ID: 22A207-01                   Dilution Factor: 1
Lab File ID: LA25015A                    Matrix: WATER
Ext Btch ID: 22DSA017W                   % Moisture: NA
Calib. Ref.: LA25004A                    Instrument ID: D5
=====

```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)		
Diesel	ND	0.024	0.012		
Motor Oil	ND	0.047	0.024		
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT	
Bromobenzene	0.377	0.470	80	60-130	
Hexacosane	0.107	0.118	91	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 : 1060ml Final Volume : 5ml  
Prepared by : HWang Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/18/22 08:45
Project     : 981948                     Date Received: 01/21/22
Batch No.   : 22A207                     Date Extracted: 01/24/22 11:15
Sample ID   : 202201200765              Date Analyzed: 01/25/22 14:53
Lab Samp ID: 22A207-01                   Dilution Factor: 1
Lab File ID: LA25015A                    Matrix: WATER
Ext Btch ID: 22DSA017W                   % Moisture: NA
Calib. Ref.: LA25005A                    Instrument ID: D5
=====
  
```

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.377	0.470	80	60-130
Hexacosane	0.107	0.118	91	60-130

Notes:

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

Detection limits are reported relative to sample result significant figures.  
 Sample Amount : 1060ml                      Final Volume : 5ml  
 Prepared by : HWang                              Analyzed by : SDeeso

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/18/22 08:45
Project    : 981948                      Date Received: 01/21/22
Batch No.  : 22A207                      Date Extracted: 01/24/22 11:15
Sample ID  : 202201200765               Date Analyzed: 01/25/22 14:53
Lab Samp ID: 22A207-01                  Dilution Factor: 1
Lab File ID: LA25015A                   Matrix: WATER
Ext Btch ID: 22DSA017W                  % Moisture: NA
Calib. Ref.: LA25006A                   Instrument ID: D5
=====
    
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.047	0.024	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.377	0.470	80	60-130
Hexacosane	0.107	0.118	91	60-130

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP8 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1060ml                      Final Volume : 5ml  
 Prepared by : HWang                          Analyzed by : SDeeso

# QC SUMMARIES

METHOD 3520C/8015B  
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 11:15
Project    : 981948                       Date Received: 01/24/22
Batch No.  : 22A207                       Date Extracted: 01/24/22 11:15
Sample ID  : MBLK1W                       Date Analyzed: 01/25/22 13:41
Lab Samp ID: DSA017WB                     Dilution Factor: 1
Lab File ID: LA25011A                     Matrix: WATER
Ext Btch ID: 22DSA017W                   % Moisture: NA
Calib. Ref.: LA25004A                   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	0.404	0.500	81	60-130
Hexacosane	0.122	0.125	97	60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
Prepared by : HWang                              Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981948  
BATCH NO. : 22A207  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSA017WB DSA017WL  
LAB FILE ID : LA25011A LA25012A  
DATE PREPARED : 01/24/22 11:15 01/24/22 11:15  
DATE ANALYZED : 01/25/22 13:41 01/25/22 13:59  
PREP BATCH : 22DSA017W 22DSA017W  
CALIBRATION REF: LA25004A LA25004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.52	101	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.429	86	60-130
Hexacosane	0.125	0.127	102	60-130

MB: Method Blank sample LCS: Lab Control Sample



EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981948  
BATCH NO. : 22A207  
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR:	1	1	1
SAMPLE ID	: 202201200765	202201200765MS	202201200765MSD
LAB SAMPLE ID	: 22A207-01	22A207-01M	22A207-01S
LAB FILE ID	: LA25015A	LA25016A	LA25017A
DATE PREPARED	: 01/24/22 11:15	01/24/22 11:15	01/24/22 11:15
DATE ANALYZED	: 01/25/22 14:53	01/25/22 15:11	01/25/22 15:28
PREP BATCH	: 22DSA017W	22DSA017W	22DSA017W
CALIBRATION REF:	LA25004A	LA25004A	LA25004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.50	2.40	96	2.53	2.31	91	4	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.500	0.415	83	0.505	0.368	73	60-130
Hexacosane	0.125	0.124	99	0.126	0.127	101	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: 01/24/22 11:15
Project    : 981948                       Date Received: 01/24/22
Batch No.  : 22A207                       Date Extracted: 01/24/22 11:15
Sample ID  : MBLK1W                       Date Analyzed: 01/25/22 13:41
Lab Samp ID: DSA017WB                    Dilution Factor: 1
Lab File ID: LA25011A                    Matrix: WATER
Ext Btch ID: 22DSA017W                  % Moisture: NA
Calib. Ref.: LA25005A                   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	0.404	0.500	81	60-130
Hexacosane	0.122	0.125	97	60-130

Notes:

RL : Reporting Limit  
 Parameter H-C Range  
 JP5 C8-C18

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

Sample Amount : 1000ml                      Final Volume : 5ml  
 Prepared by : HWang                              Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981948  
BATCH NO. : 22A207  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSA017WB J5A017WL  
LAB FILE ID : LA25011A LA25013A  
DATE PREPARED : 01/24/22 11:15 01/24/22 11:15  
DATE ANALYZED : 01/25/22 13:41 01/25/22 14:17  
PREP BATCH : 22DSA017W 22DSA017W  
CALIBRATION REF: LA25005A LA25005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.23	89	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.497	99	60-130
Hexacosane	0.125	0.124	99	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA  
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981951  
BATCH NO. : 22A208  
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                                     % MOISTURE:NA
DILUTION FACTOR: 1                                     1
SAMPLE ID   : 202201200773                             202201200773MSD
LAB SAMPLE ID : 22A208-01                               22A208-01S
LAB FILE ID  : LA25018A                                LA25019A
DATE PREPARED : 01/24/22 11:15                        01/24/22 11:15
DATE ANALYZED : 01/25/22 15:46                        01/25/22 16:04
PREP BATCH   : 22DSA017W                               22DSA017W
CALIBRATION REF: LA25005A                             LA25005A
=====
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.60	2.27	87	2.58	2.38	92	5	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.520	0.441	85	0.515	0.491	95	60-130
Hexacosane	0.130	0.122	94	0.129	0.125	97	60-130

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

METHOD 3520C/8015B  
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 11:15
Project     : 981948                     Date Received: 01/24/22
Batch No.   : 22A207                     Date Extracted: 01/24/22 11:15
Sample ID   : MBLK1W                     Date Analyzed: 01/25/22 13:41
Lab Samp ID: DSA017WB                   Dilution Factor: 1
Lab File ID: LA25011A                   Matrix: WATER
Ext Btch ID: 22DSA017W                   % Moisture: NA
Calib. Ref.: LA25006A                   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	0.404	0.500	81	60-130
Hexacosane	0.122	0.125	97	60-130

Notes:

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

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

EMAX QUALITY CONTROL DATA  
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL  
PROJECT : 981948  
BATCH NO. : 22A207  
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA  
DILUTION FACTOR: 1 1  
SAMPLE ID : MBLK1W LCS1W  
LAB SAMPLE ID : DSA017WB J8A017WL  
LAB FILE ID : LA25011A LA25014A  
DATE PREPARED : 01/24/22 11:15 01/24/22 11:15  
DATE ANALYZED : 01/25/22 13:41 01/25/22 14:35  
PREP BATCH : 22DSA017W 22DSA017W  
CALIBRATION REF: LA25006A LA25006A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.26	90	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.533	107	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 : 981951  
BATCH NO. : 22A208  
METHOD : 3520C/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : 202201200775	202201200775MS	202201200775MSD
LAB SAMPLE ID : 22A208-03	22A208-03M	22A208-03S
LAB FILE ID : LA25021A	LA25022A	LA25023A
DATE PREPARED : 01/24/22 11:15	01/24/22 11:15	01/24/22 11:15
DATE ANALYZED : 01/25/22 16:40	01/25/22 16:57	01/25/22 17:15
PREP BATCH : 22DSA017W	22DSA017W	22DSA017W
CALIBRATION REF: LA25006A	LA25006A	LA25006A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.53	1.97	78	2.50	1.84	74	7	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.505	0.478	95	0.500	0.428	86	60-130
Hexacosane	0.126	0.112	89	0.125	0.117	94	60-130

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