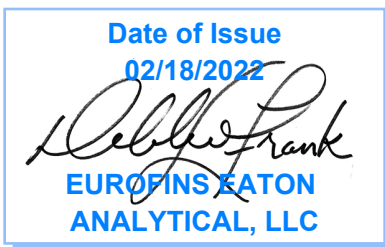


750 Royal Oaks Drive, Suite 100
Monrovia, California 91016-3629
Tel: (626) 386-1100
Fax: (866) 988-3757
1 800 566 LABS (1 800 566 5227)

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: 983123
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 Pseudalart	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x	
Total Microcystins and Nodularins	EPA 546	X	
Yeast and Mold	SM 9610	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x	
1,4-Dioxane	EPA 522	x	
2,3,7,8-TCDD	Modified EPA 1613 B	x	
Acrylamide	+ LCMS 2440)	x	
Algal Toxins/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

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 #: 983123
 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 26, 2022** at **1256**. 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
202201260370	HALAWA SHAFT-331-241-TP401 SDWIS PWSID: HI0000331 SDWIS FACILITY ID: TP401 SDWIS SAMPLE POINT ID: 241 (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	01/24/2022 0925
202201260371	TRAVEL BLANK::HALAWA SHAFT-331-241-TP401 (SUB)Gas Fraction Hydrocarbons	01/24/2022 0925
202201260372	MOANALUA WELLS (331-223-TP202) SDWIS PWSID: HI0000331 SDWIS FACILITY ID: TP202 SDWIS SAMPLE POINT ID: 223 (SUB)Gas Fraction Hydrocarbons TPH 8015 Diesel and Motor Oil TPH 8015 Jet Fuel 5 TPH 8015 Jef Fuel 8	01/24/2022 0845
202201260373	TRAVEL BLANK::MOANALUA WELLS (331-223-TP202) (SUB)Gas Fraction Hydrocarbons	01/24/2022 0845

Test Description



Eaton Analytical

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

CHAIN OF CUSTODY RECORD

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS:

SAMPLE TEMP RECEIVED AT:

Colton / No. California / Arizona
 Monrovia

°C (Compliance: 4 ± 2 °C)
0.7 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen Partially Frozen Thawed No Ice

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

SAMPLES CHECKED AGAINST COC BY: GR

SAMPLES LOGGED IN BY: GR

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

ANALYSIS: TPH 8015 DIESEL AND MOTOR OIL-C1
TPH 8015 JET FUEL 5.0,
TPH 8015 1-24-22 09:25
2 OUT OF 4 BROKEN
187703

TO BE COMPLETED BY SAMPLER:

COMPANY/AGENCY NAME: BWS HONOLULU

PROJECT CODE: Red Hill

EEA CLIENT CODE: Honolululu

SAMPLE GROUP:

TAT requested: rush by adv notice only

STD ___ 1 wk ___ X ___ 3 day ___ 2 day ___ 1 day ___

(check for yes)

COMPLIANCE SAMPLES

NON-COMPLIANCE SAMPLES

REGULATION INVOLVED:

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

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

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

SAMPLE DATE	SAMPLE TIME	SAMPLE ID	CLIENT LAB ID	MATRIX	FIELD DATA	FIELD DATA	Weekly Red Hill	SAMPLER COMMENTS
1-24-22	0825	HALAWA SHAFT	HI0000331-241	CFW			X	2 OUT OF 4 (TPH 8015 DIESEL AND MOTOR OIL-C1) BROKEN - GR
1-24-22	0845	MOANALUA WELLS	HI0000331-223	CFW			X	
		Temperature Blank						

Temp Blank: 11.0 °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 WW = Waste Water SW = Storm Water SL = Sludge
O = Other - Please Identify

SAMPLED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RELINQUISHED BY:	<u>[Signature]</u>	Derek Dotson	Honolulu Board of Water Supply	1-24-2022	
RECEIVED BY:	<u>[Signature]</u>	Derek Dotson	Honolulu Board of Water Supply	1-25-2022	12:00
RELINQUISHED BY:	<u>[Signature]</u>	G. REUTNER	CSA	01-26-2022	12:56
RECEIVED BY:					



Eaton Analytical

INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 482773

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 = 631A (Observation = 1.1 °C) (Corr.Factor = -0.2 °C) (Final = 0.9 °C)

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

METHOD OF SHIPMENT: Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: 1 - 5491 4034 2278
2 - 5491 4034 2782
3 - 5491 4034 2793

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

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

RECEIVED BY: <u>[Signature]</u>	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
		<u>G. PEETNER</u>	Eurofins Eaton Analytical	<u>01-26-2022</u>	<u>12:56</u>
SAMPLES CHECKED AGAINST COQ BX:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
			Eurofins Eaton Analytical		

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

Laboratory Comments

Report: 983123
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 Gas, Diesel, Motor Oil and Jet Fuels are submitted by Emax Laboratories



Eaton Analytical

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

Laboratory Hits

Report: 983123
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:
01/26/2022 1256

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

SUMMARY OF POSITIVE DATA ONLY

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

Report: 983123
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:
 01/26/2022 1256

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
<u>HALAWA SHAFT-331-241-TP401 (202201260370)</u>						Sampled on 01/24/2022 0925			
Facility ID: TP401									
Sample Point ID: 241									
PWSID: HI0000331									
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
01/27/22	01/27/22 17:11			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
SW 8015B - TPH 8015 Diesel and Motor Oil									
01/31/22	02/01/22 15:39			(SW 8015B)	TPH Diesel	ND	mg/L	0.025	1
01/31/22	02/01/22 15:39			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.05	1
EPA 8015 - Jet Fuel 5 C8-C18									
01/31/22	02/01/22 15:39			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.05	1
EPA 8015 - Jet Fuel 8 C8-C18									
	02/01/22 15:39			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.05	1
<u>TRAVEL BLANK::HALAWA SHAFT-331-241-TP401 (202201260371)</u>						Sampled on 01/24/2022 0925			
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
01/27/22	01/27/22 17:47			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
<u>MOANALUA WELLS (331-223-TP202) (202201260372)</u>						Sampled on 01/24/2022 0845			
Facility ID: TP202									
Sample Point ID: 223									
PWSID: HI0000331									
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
01/27/22	01/27/22 18:24			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
SW 8015B - TPH 8015 Diesel and Motor Oil									
01/31/22	02/01/22 15:58			(SW 8015B)	TPH Diesel	ND	mg/L	0.025	1
01/31/22	02/01/22 15:58			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.051	1
EPA 8015 - Jet Fuel 5 C8-C18									
01/31/22	02/01/22 15:58			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.051	1
EPA 8015 - Jet Fuel 8 C8-C18									
	02/01/22 15:58			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.051	1
<u>TRAVEL BLANK::MOANALUA WELLS (331-223-TP202) (202201260373)</u>						Sampled on 01/24/2022 0845			
SW 8015B - (SUB)Gas Fraction Hydrocarbons									
01/27/22	01/27/22 16:34			(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: 02-15-2022
EMAX Batch No.: 22A259

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 983123

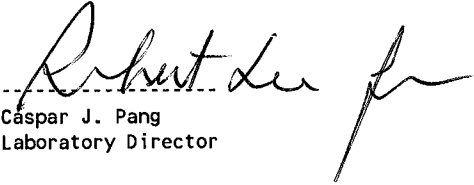
Enclosed is the Laboratory report for samples received on 01/27/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202201260370	A259-01	01/24/22	WATER	TPH TPH GASOLINE
202201260371	A259-02	01/24/22	WATER	TPH GASOLINE
202201260372	A259-03	01/24/22	WATER	TPH TPH GASOLINE
202201260373	A259-04	01/24/22	WATER	TPH GASOLINE
202201260372MS	A259-03M	01/24/22	WATER	TPH GASOLINE TPH DIESEL
202201260372MSD	A259-03S	01/24/22	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 #: 983123 Report Due: 01/31/2022

22A259 Date: 1/27/2022

Submittal Form

*REPORTING REQUIREMENTS: Do Not Combine Reports with any other samples submitted under different Folder Numbers! Report & Invoice must have the Folder# 983123 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 ID: 202201260370 Client Sample ID for reference on! HALAWA SHAFT-331-241-TP401 Sample Date & Time Matrix: 01/24/22 0925 DW Clip Code: PWSID JLS

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

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: 202201260371 Client Sample ID for reference on! TRAVEL BLANK: HALAWA SHAFT-331-241-TP401 Sample Date & Time Matrix: 01/24/22 0925 DW Clip Code: PWSID JLS

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

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

Relinquished by: Sample Control Date: 1/27/22 Time: 12:21

Received by: Sample Control Date: 01/27/22 Time: 12:21

Relinquished by: Sample Control Date: Time:

Received by: Sample Control Date: Time:

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp: 03.0 @ 4.9°

22A259

Sample ID 202201260372	Client Sample ID for reference on/ MOANALUA WELLS (331-223-TP202)	Sample Date & Time 01/24/22 0845 DW	Clip Code	PWSID	JLS
Sample type:	Sample Event:	Sample Point ID:	Facility ID:	Static ID:	

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 202201260373	Client Sample ID for reference on/ TRAVEL BLANK:MOANALUA WELLS (331-223-TP202)	Sample Date & Time 01/24/22 0845 DW	Clip Code	PWSID	JLS
Sample type:	Sample Event:	Sample Point ID:	Facility ID:	Static ID:	

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

Relinquished by: XGR Date: 1/27/22 Time: 12:21

Received by: [Signature] Date: 01/27/22 Time: 12:21

Relinquished by: _____ 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

Type of Delivery <input type="checkbox"/> Fedex <input type="checkbox"/> UPS <input type="checkbox"/> GSO <input type="checkbox"/> Others	Airbill / Tracking Number	ECN <u>22A-259</u>
<input type="checkbox"/> EMAX Courier <input checked="" type="checkbox"/> Client Delivery		Recipient <u>JOCELYNE SOLIS RAMOS</u>
		Date <u>01/27/22</u> Time <u>12:21</u>

COC INSPECTION

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

Note: _____

PACKAGING INSPECTION

Container	<input checked="" type="checkbox"/> Cooler	<input type="checkbox"/> Box	<input type="checkbox"/> Other
Condition	<input type="checkbox"/> Custody Seal	<input type="checkbox"/> Intact	<input type="checkbox"/> Damaged
Packaging	<input checked="" type="checkbox"/> Bubble Pack	<input type="checkbox"/> Styrofoam	<input type="checkbox"/> Popcorn
Temperatures (Cool, ≤6 °C but not frozen)	<input checked="" type="checkbox"/> Cooler 1 <u>3.0</u> °C	<input checked="" type="checkbox"/> Cooler 2 <u>4.9</u> °C	<input type="checkbox"/> Cooler 3 _____ °C
	<input type="checkbox"/> Cooler 6 _____ °C	<input type="checkbox"/> Cooler 7 _____ °C	<input type="checkbox"/> Cooler 4 _____ °C
Thermometer: A - S/N <u>210191056</u> on <u>12/14</u>	B - S/N <u>210271390</u>	C - S/N <u>210271399</u>	D - S/N _____

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

Note: _____

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action
2	617	D10		R8
2	617	D7	two dates on label - 12/20/21 and 01/24/22	R1
4	17	D7	two dates on label - 12/15/21 and 01/24/22	↓ R8
1,3	4,5,12-15	D2	Jet Fuel B is not indicated on label	R8
<i>01/27/22</i>				

pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.

RB 1/31/22

NOTES/OBSERVATIONS:

LEGEND:

- 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 _____
- D23 _____
- D24 _____

Continue to next page.

- 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 JOCELYNE SOLIS RAMOS
Date 01/27/22

SRF [Signature]
Date 1/27/22

PM RB
Date 1/31/22

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

983123

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

SDG#: 22A259

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 983123

SDG : 22A259

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

A total of four(4) water samples were received on 01/27/22 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. VG39A17B - 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. VG39A17L/VG39A17C 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 A259-03M/A259-03S. 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     : 983123
SDG NO.    : 22A259
Instrument ID : GCT039
=====

```

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER		Extraction Date/Time	Sample Data FN	Calibration Prep. Data FN	Batch	Notes
				Analysis Date/Time	Date/Time					
202201260373	VG39A17B	1	NA	01/27/2214:08	01/27/2214:08	EA27005A	EA27003A	22VG39A17	Method Blank	
202201260370	VG39A17L	1	NA	01/27/2214:44	01/27/2214:44	EA27006A	EA27003A	22VG39A17	Lab Control Sample (LCS)	
202201260371	VG39A17C	1	NA	01/27/2215:21	01/27/2215:21	EA27007A	EA27003A	22VG39A17	LCS Duplicate	
202201260372	A259-04	1	NA	01/27/2216:34	01/27/2216:34	EA27009A	EA27003A	22VG39A17	Field Sample	
202201260372MS	A259-01	1	NA	01/27/2217:11	01/27/2217:11	EA27010A	EA27003A	22VG39A17	Field Sample	
202201260372MS	A259-02	1	NA	01/27/2217:47	01/27/2217:47	EA27011A	EA27003A	22VG39A17	Field Sample	
202201260372MS	A259-03	1	NA	01/27/2218:24	01/27/2218:24	EA27012A	EA27003A	22VG39A17	Field Sample	
202201260372MS	A259-03M	1	NA	01/27/2219:01	01/27/2219:01	EA27013A	EA27003A	22VG39A17	Matrix Spike Sample (MS)	
202201260372MSD	A259-03S	1	NA	01/27/2219:58	01/27/2219:58	EA27014A	EA27003A	22VG39A17	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: 01/24/22 09:25
Project     : 983123                     Date Received: 01/27/22
Batch No.   : 22A259                     Date Extracted: 01/27/22 17:11
Sample ID   : 202201260370              Date Analyzed: 01/27/22 17:11
Lab Samp ID: A259-01                     Dilution Factor: 1
Lab File ID: EA27010A                    Matrix: WATER
Ext Btch ID: 22VG39A17                   % Moisture: NA
Calib. Ref.: EA27003A                    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	0.0323	0.0400	81	60-140

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

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

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

=====
Client : EUROFINS EATON ANALYTICAL Date Collected: 01/24/22 09:25
Project : 983123 Date Received: 01/27/22
Batch No. : 22A259 Date Extracted: 01/27/22 17:47
Sample ID : 202201260371 Date Analyzed: 01/27/22 17:47
Lab Samp ID: A259-02 Dilution Factor: 1
Lab File ID: EA27011A Matrix: WATER
Ext Btch ID: 22VG39A17 % Moisture: NA
Calib. Ref.: EA27003A 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	0.0318	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: 01/24/22 08:45
Project     : 983123                      Date Received: 01/27/22
Batch No.   : 22A259                      Date Extracted: 01/27/22 18:24
Sample ID   : 202201260372               Date Analyzed: 01/27/22 18:24
Lab Samp ID : A259-03                    Dilution Factor: 1
Lab File ID : EA27012A                   Matrix: WATER
Ext Btch ID : 22VG39A17                  % Moisture: NA
Calib. Ref.: EA27003A                    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	0.0318	0.0400	79	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: 01/24/22 08:45
Project      : 983123                       Date Received: 01/27/22
Batch No.    : 22A259                       Date Extracted: 01/27/22 16:34
Sample ID    : 202201260373                Date Analyzed: 01/27/22 16:34
Lab Samp ID  : A259-04                      Dilution Factor: 1
Lab File ID  : EA27009A                     Matrix: WATER
Ext Btch ID  : 22VG39A17                   % Moisture: NA
Calib. Ref.  : EA27003A                     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	0.0317	0.0400	79	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: 01/27/22 14:08
Project     : 983123                      Date Received: 01/27/22
Batch No.   : 22A259                      Date Extracted: 01/27/22 14:08
Sample ID   : MBLK1W                      Date Analyzed: 01/27/22 14:08
Lab Samp ID: VG39A17B                    Dilution Factor: 1
Lab File ID: EA27005A                    Matrix: WATER
Ext Btch ID: 22VG39A17                  % Moisture: NA
Calib. Ref.: EA27003A                    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 : 983123
BATCH NO. : 22A259
METHOD : 5030B/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID : VG39A17B	VG39A17L	VG39A17C
LAB FILE ID : EA27005A	EA27006A	EA27007A
DATE PREPARED : 01/27/22 14:08	01/27/22 14:44	01/27/22 15:21
DATE ANALYZED : 01/27/22 14:08	01/27/22 14:44	01/27/22 15:21
PREP BATCH : 22VG39A17	22VG39A17	22VG39A17
CALIBRATION REF: EA27003A	EA27003A	EA27003A

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	0.461	92	0.500	0.452	90	2	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0422	106	0.0400	0.0411	103	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 : 983123
BATCH NO. : 22A259
METHOD : 5030B/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202201260372                       202201260372MSD
LAB SAMPLE ID : A259-03                          A259-03S
LAB FILE ID  : EA27012A                          EA27013A
DATE PREPARED : 01/27/22 18:24                   01/27/22 19:01
DATE ANALYZED : 01/27/22 18:24                   01/27/22 19:38
PREP BATCH   : 22VG39A17                         22VG39A17
CALIBRATION REF: EA27003A                        EA27003A
  
```

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	0.491	98	0.500	0.497	99	1	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0425	106	0.0400	0.0434	109	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

983123

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22A259

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 983123

SDG : 22A259

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 01/27/22 to be analyzed for Total Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. 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. DSA023WB - 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 DSA023WL. 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 22A259-03M/22A259-03S. 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

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.

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 983123

SDG : 22A259

METHOD 3520C/8015B PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 01/27/22 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. 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. DSA023WB - 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 J5A023WL. 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 22A260-01M/22A260-01S. Refer to Matrix QC summary form for details.

Surrogate

Surrogates were added on QC and field samples. All surrogate recoveries were within QC limits. Refer to sample result summary forms for details.

Sample Analysis

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

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 983123

SDG : 22A259

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

A total of two(2) water samples were received on 01/27/22 to be analyzed for Petroleum Hydrocarbons by Extraction in accordance with Method 3520C/8015B and project specific requirements.

Holding Time

Samples were analyzed within the prescribed holding time.

Calibration

Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. 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. DSA023WB - 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 J8A023WL. 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 22A260-03M/22A260-03S. 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

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

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG NO. : 22A259
Instrument ID : D5

Client : EUROFINS EATON ANALYTICAL
Project : 983123

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	WATER			Extraction DateTime	Sample Data FN	Calibration Prep. Data FN	Batch	Notes
				Analysis DateTime	Analysis DateTime	Analysis DateTime					
MBLKTW	DSA023WB	1	NA	02/01/2214:25	01/31/2212:00	LB01009A	LB01003A	22DSA023W	Method Blank		
LCS1W	DSA023WL	1	NA	02/01/2214:44	01/31/2212:00	LB01010A	LB01003A	22DSA023W	Lab Control Sample (LCS)		
202201260370	A259-01	1	NA	02/01/2215:39	01/31/2212:00	LB01013A	LB01003A	22DSA023W	Field Sample		
202201260372	A259-03	1	NA	02/01/2215:58	01/31/2212:00	LB01014A	LB01003A	22DSA023W	Field Sample		
202201260372MS	A259-03M	1	NA	02/01/2216:16	01/31/2212:00	LB01015A	LB01003A	22DSA023W	Matrix Spike Sample (MS)		
202201260372MSD	A259-03S	1	NA	02/01/2216:35	01/31/2212:00	LB01016A	LB01003A	22DSA023W	MS Duplicate (MSD)		

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

SDG NO. : 22A259
Instrument ID : D5

Client : EUROFINS EATON ANALYTICAL
Project : 983123

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Prep. Data FN	Notes
MBLK1W	DSA023WB	1	NA	02/01/2214:25	01/31/2212:00	LB01009A	LB01004A	22DSA023W Method Blank
LCS1W	J5A023WL	1	NA	02/01/2215:02	01/31/2212:00	LB01011A	LB01004A	22DSA023W Lab Control Sample (LCS)
202201260370	A259-01	1	NA	02/01/2215:39	01/31/2212:00	LB01013A	LB01004A	22DSA023W Field Sample
202201260372	A259-03	1	NA	02/01/2215:58	01/31/2212:00	LB01014A	LB01004A	22DSA023W Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL    Date Collected: 01/24/22 09:25
Project     : 983123                       Date Received: 01/27/22
Batch No.   : 22A259                       Date Extracted: 01/31/22 12:00
Sample ID   : 202201260370                 Date Analyzed: 02/01/22 15:39
Lab Samp ID: 22A259-01                     Dilution Factor: 1
Lab File ID: LB01013A                      Matrix: WATER
Ext Btch ID: 22DSA023W                    % Moisture: NA
Calib. Ref.: LB01003A                     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	0.382	0.495	77	60-130
Hexacosane	0.121	0.124	98	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 : 1010ml Final Volume : 5ml
Prepared by : HWang Analyzed by : SDeeso

METHOD 3520C/8015B
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 09:25
Project    : 983123                      Date Received: 01/27/22
Batch No.  : 22A259                      Date Extracted: 01/31/22 12:00
Sample ID  : 202201260370               Date Analyzed: 02/01/22 15:39
Lab Samp ID: 22A259-01                  Dilution Factor: 1
Lab File ID: LB01013A                   Matrix: WATER
Ext Btch ID: 22DSA023W                  % Moisture: NA
Calib. Ref.: LB01004A                   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	0.382	0.495	77	60-130
Hexacosane	0.121	0.124	98	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 : 1010ml Final Volume : 5ml
 Prepared by : HWang Analyzed by : SDeeso

METHOD 3520C/8015B
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 09:25
Project     : 983123                     Date Received: 01/27/22
Batch No.   : 22A259                     Date Extracted: 01/31/22 12:00
Sample ID   : 202201260370              Date Analyzed: 02/01/22 15:39
Lab Samp ID: 22A259-01                   Dilution Factor: 1
Lab File ID: LB01013A                    Matrix: WATER
Ext Btch ID: 22DSA023W                   % Moisture: NA
Calib. Ref.: LB01005A                    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	0.382	0.495	77	60-130
Hexacosane	0.121	0.124	98	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 : 1010ml Final Volume : 5ml
 Prepared by : HWang Analyzed by : SDeeso

METHOD 3520C/8015B
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 08:45
Project    : 983123                      Date Received: 01/27/22
Batch No.  : 22A259                      Date Extracted: 01/31/22 12:00
Sample ID  : 202201260372               Date Analyzed: 02/01/22 15:58
Lab Samp ID: 22A259-03                   Dilution Factor: 1
Lab File ID: LB01014A                    Matrix: WATER
Ext Btch ID: 22DSA023W                   % Moisture: NA
Calib. Ref.: LB01004A                    Instrument ID: D5
=====
    
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.051	0.025

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.402	0.505	80	60-130
Hexacosane	0.119	0.126	94	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 : 990ml Final Volume : 5ml
 Prepared by : HWang Analyzed by : SDeeso

METHOD 3520C/8015B
 PETROLEUM HYDROCARBONS BY EXTRACTION

```

=====
Client      : EUROFINS EATON ANALYTICAL   Date Collected: 01/24/22 08:45
Project     : 983123                     Date Received: 01/27/22
Batch No.   : 22A259                     Date Extracted: 01/31/22 12:00
Sample ID   : 202201260372              Date Analyzed: 02/01/22 15:58
Lab Samp ID : 22A259-03                 Dilution Factor: 1
Lab File ID : LB01014A                  Matrix: WATER
Ext Btch ID : 22DSA023W                 % Moisture: NA
Calib. Ref.: LB01005A                   Instrument ID: D5
=====
    
```

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)	
JP8	ND	0.051	0.025	
SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.402	0.505	80	60-130
Hexacosane	0.119	0.126	94	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 : 990ml 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: 01/31/22 12:00
Project     : 983123                      Date Received: 01/31/22
Batch No.   : 22A259                      Date Extracted: 01/31/22 12:00
Sample ID   : MBLK1W                      Date Analyzed: 02/01/22 14:25
Lab Samp ID: DSA023WB                    Dilution Factor: 1
Lab File ID: LB01009A                    Matrix: WATER
Ext Btch ID: 22DSA023W                   % Moisture: NA
Calib. Ref.: LB01003A                    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	0.445	0.500	89	60-130
Hexacosane	0.128	0.125	102	60-130

Notes:

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

Reported ND at RL quantitated per pattern recognition.

Detection limits are reported relative to sample result significant figures.

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

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 983123
BATCH NO. : 22A259
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA
DILUTION FACTOR: 1 1
SAMPLE ID : MBLK1W LCS1W
LAB SAMPLE ID : DSA023WB DSA023WL
LAB FILE ID : LB01009A LB01010A
DATE PREPARED : 01/31/22 12:00 01/31/22 12:00
DATE ANALYZED : 02/01/22 14:25 02/01/22 14:44
PREP BATCH : 22DSA023W 22DSA023W
CALIBRATION REF: LB01003A LB01003A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.32	93	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.401	80	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 : 983123
BATCH NO. : 22A259
METHOD : 3520C/8015B

MATRIX : WATER		% MOISTURE:NA
DILUTION FACTOR: 1	1	1
SAMPLE ID : 202201260372	202201260372MS	202201260372MSD
LAB SAMPLE ID : 22A259-03	22A259-03M	22A259-03S
LAB FILE ID : LB01014A	LB01015A	LB01016A
DATE PREPARED : 01/31/22 12:00	01/31/22 12:00	01/31/22 12:00
DATE ANALYZED : 02/01/22 15:58	02/01/22 16:16	02/01/22 16:35
PREP BATCH : 22DSA023W	22DSA023W	22DSA023W
CALIBRATION REF: LB01003A	LB01003A	LB01003A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRcc (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.35	2.16	92	2.35	1.96	83	10	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRcc (%)	QCLimit (%)
Bromobenzene	0.470	0.416	89	0.470	0.352	75	60-130
Hexacosane	0.118	0.123	105	0.118	0.123	105	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: 01/31/22 12:00
Project     : 983123                     Date Received: 01/31/22
Batch No.   : 22A259                     Date Extracted: 01/31/22 12:00
Sample ID   : MBLK1W                     Date Analyzed: 02/01/22 14:25
Lab Samp ID: DSA023WB                   Dilution Factor: 1
Lab File ID: LB01009A                   Matrix: WATER
Ext Btch ID: 22DSA023W                  % Moisture: NA
Calib. Ref.: LB01004A                   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	0.445	0.500	89	60-130
Hexacosane	0.128	0.125	102	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 : 983123
BATCH NO. : 22A259
METHOD : 3520C/8015B

MATRIX : WATER % MOISTURE:NA
DILUTION FACTOR: 1 1
SAMPLE ID : MBLK1W LCS1W
LAB SAMPLE ID : DSA023WB J5A023WL
LAB FILE ID : LB01009A LB01011A
DATE PREPARED : 01/31/22 12:00 01/31/22 12:00
DATE ANALYZED : 02/01/22 14:25 02/01/22 15:02
PREP BATCH : 22DSA023W 22DSA023W
CALIBRATION REF: LB01004A LB01004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP5	ND	2.50	2.26	90	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.446	89	60-130
Hexacosane	0.125	0.115	92	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 983125
BATCH NO. : 22A260
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                               % MOISTURE:NA
DILUTION FACTOR: 1                               1
SAMPLE ID   : 202201260376                       202201260376MSD
LAB SAMPLE ID : 22A260-01                         22A260-01S
LAB FILE ID  : LB01017A                          LB01019A
DATE PREPARED : 01/31/22 12:00                   01/31/22 12:00
DATE ANALYZED : 02/01/22 16:53                   02/01/22 17:30
PREP BATCH   : 22DSA023W                         22DSA023W
CALIBRATION REF: LB01004A                        LB01004A
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.38	2.24	94	2.40	2.37	99	6	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.475	0.435	92	0.480	0.466	97	60-130
Hexacosane	0.119	0.118	99	0.120	0.116	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: 01/31/22 12:00
Project     : 983123                     Date Received: 01/31/22
Batch No.   : 22A259                     Date Extracted: 01/31/22 12:00
Sample ID   : MBLK1W                     Date Analyzed: 02/01/22 14:25
Lab Samp ID: DSA023WB                    Dilution Factor: 1
Lab File ID: LB01009A                    Matrix: WATER
Ext Btch ID: 22DSA023W                   % Moisture: NA
Calib. Ref.: LB01005A                    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	0.445	0.500	89	60-130
Hexacosane	0.128	0.125	102	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 : 983123
BATCH NO. : 22A259
METHOD : 3520C/8015B

=====

MATRIX : WATER % MOISTURE:NA
DILUTION FACTOR: 1 1
SAMPLE ID : MBLK1W LCS1W
LAB SAMPLE ID : DSA023WB J8A023WL
LAB FILE ID : LB01009A LB01012A
DATE PREPARED : 01/31/22 12:00 01/31/22 12:00
DATE ANALYZED : 02/01/22 14:25 02/01/22 15:21
PREP BATCH : 22DSA023W 22DSA023W
CALIBRATION REF: LB01005A LB01005A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.07	83	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.540	108	60-130
Hexacosane	0.125	0.121	97	60-130

=====

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 983125
BATCH NO. : 22A260
METHOD : 3520C/8015B

```

=====
MATRIX      : WATER                                     % MOISTURE:NA
DILUTION FACTOR: 1                                     1
SAMPLE ID   : 202201260378                             202201260378MSD
LAB SAMPLE ID : 22A260-03                               22A260-03S
LAB FILE ID  : LB01020A                                LB01022A
DATE PREPARED : 01/31/22 12:00                        01/31/22 12:00
DATE ANALYZED : 02/01/22 17:48                        02/01/22 18:25
PREP BATCH   : 22DSA023W                               22DSA023W
CALIBRATION REF: LB01005A                             LB01005A
  
```

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.33	2.19	94	2.33	2.05	88	7	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.465	0.480	103	0.465	0.508	109	60-130
Hexacosane	0.116	0.117	101	0.116	0.115	99	60-130

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