eurofins | Eaton Analytical

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

A2LA ACCREDITED
CERTIFICATE #'s 5890.01 & 5890.02

Laboratory Report

for

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

Date of Issue
04/21/2022

Linda Geddes
EUROFINS EATON ANALYTICAL, LLC

NELAP ACCREDITED TNI LABORATORY
Utah ELCP CA00006

Report: 989412
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

DEB: Debbie L Frank
Project Manager

* 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

Eurofins Eaton Analytical, LLC
750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629
T | 626-386-1100
F | 866-988-3757
www.EurofinsUS.com/Eaton

ISO/IEC 17025:2917 Accredited Method List

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

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

https://www.eurofinsus.com/Eaton

Test(s)	Method(s)	Potable Water *	Waste Water
Enterococci	Enterolert	x	x
Escherichia coli (Enumeration)	SM 9221 B.1 SM 9221 F	x	
Fecal Coliform (P/A and Enumeration)	SM 9221 C (MTF/EC), SM 9221 E (MTF/EC)	x	x
Fecal Streptococci and Enterococci	SM 9230 B	x	x
Heterotrophic Bacteria	SM 9215 B	x	
Legionella	Legiolert®	x	
Pseudomonas aeruginosa	Idexx Pseudalert	x	
Total Coliform (P/A and Enumeration)	SM 9221A, SM 9221B, SM 9221 C	x	x
Total Coliform, Total Coliform with Chlorine Present	SM 9221 B	x	x
Total Coliform/E. coli (P/A and Enumeration, Idexx Colilert, Idexx Colilert 18, Colisure)	SM 9223	x	
Total Microcystins and Nodularins	EPA 546	X	
Yeast and Mold	SM 9610	x	
1,2,3-Trichloropropane (TCP) at 5 PPT	CA SRL 524M-TCP	x	
1,4-Dioxane	EPA 522	x	
2,3,7,8-TCDD	Modified EPA 1613 B	X	
Acrylamide	+LCMS 2440)	x	
Algal Toxins/Microcys in	+ LCMS 3570	x	
Alkalinity	SM 2320B	x	x
Ammonia	EPA 350.1, SM 4500-NH3 H		x
Asbestos	EPA 100.2	x	x
Bicarbonate Alkalinity as HCO3	SM 2330 B	x	x
BOD/CBOD	SM 5210 B		x
Bromate	+LCMS- 2447	x	
Carbonate as CO3	SM 2330 B	x	x
Carbonyls	EPA 556	x	x
Chemical Oxygen Demand	EPA 410.4, SM 5220D		x
Chlorinated Acids	EPA 515.4	x	
Chlorine Dioxide	Palin Test Chlordio X Plus, SM 4500-CLO2 D	x	
Chlorine, Free, Combined, Total Residual, Chloramines	SM 4500-Cl G	x	
Color	SM2120B	x	
Conductivity	EPA 120.1, SM 2510B	x	x
Corrosivity (Langelier Index), Carbonate as CO3, Hydroxide as OH Calculated	SM 2330 B	x	
Cyanide (Amenable)	SM 4500-CN G	x	x
Cyanide (Free)	SM 4500CN F	x	x
Cyanide (Total)	EPA 335.4	x	x
Cyanogen Chloride (Screen)	+335 Mod (WC-24467)	x	
Diquat and Paraquat	EPA 549.2	x	
DBP and HAA	SM 6251 B	x	
Dissolved Organic Carbon	SM 5310 C	x	
Dissolved Oxygen	SM 4500-O G		x
EDB/DCBP/TCP	EPA 504.1	x	
EDB/DBCP and Disinfection Byproducts	EPA 551.1	x	
EDTA and NTA	+ WC-2454	x	
Endothall	EPA 548.1, +(LCMS-2445)	x	
Fluoride	SM 4500F C	x	x
Glyphosate	EPA 547	x	
Glyphosate and AMPA	+LCMS-3618	x	
Gross Alpha and Gross Beta	EPA 900.0	x	x

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

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

(+) In-House Method

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Acknowledgement of Samples Received

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

Attn: Erwin Kawata
Phone: 808-748-5091

Client ID: HONOLULU
Folder #: 989412
Project: RED-HILL
Sample Group: Red-Hill Expanded List (Albuquerque+)
Project Manager: Debbie L Frank
Phone: (626) 386-1149
PO #: C20525101 exp 05312023

The following samples were received from you on **February 24, 2022** at **1208**. 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
202202240770	MOANALUA WELLS (331-223-TP202)	02/22/2022 0930
	@625BN_Physis	(SUB)Gas Fraction Hydrocarbons	TPH 8015 Diesel and Motor Oil
	TPH 8015 Jet Fuel 5	TPH 8015 Jef Fuel 8	
202202240774	TRAVEL BLANK	02/22/2022 0930
	(SUB)Gas Fraction Hydrocarbons	

Test Description

@625BN_Physis -- 625 Base Neutral Extractable in ug/L

CHAIN OF CUSTODY RECORD

989412

eurofins | 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)

EUROFINS EATON ANALYTICAL USE ONLY:

LOGIN COMMENTS: _____

SAMPLES CHECKED AGAINST COC BY: _____

SAMPLES LOGGED IN BY: _____

SAMPLE TEMP RECEIVED AT:

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

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

☑ Monrovia 2.8 °C (Compliance: 4 ± 2 °C)

CONDITION OF BLUE ICE: Frozen ✓ Partially 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:

COMPANY/AGENCY NAME:	PROJECT CODE:
HONOLULU BOARD OF WATER SUPPLY	RED HILL-Weekly

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

TAT requested: **RUSH** STD__ 1 wk___ 3 day___ 2 day___ 1 day___

COMPLIANCE SAMPLES ☐ (check for yes) NON-COMPLIANCE SAMPLES ☒ (check for yes)

- Requires state forms ☐ 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	Red Hill	SAMPLER COMMENTS
2/22/22	0930	Moanalua Wells	HI0000331-223	CFW			X	

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
SAMPLED BY:	[redacted]	E Juagdan	BWS HONOLULU	2/22/22	0930
RELINQUISHED BY:		E Juagdan	BWS HONOLULU	2/23/22	1200
RECEIVED BY:		G. REITNER	EEA	02-24-2022	12:08
RELINQUISHED BY:					
RECEIVED BY:					

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INTERNAL CHAIN OF CUSTODY RECORD

EEA Folder Number: 989412

SAMPLE TEMP RECEIVED:
Note: If samples are out of temperature range, let the ASMs know. ASMs will determine whether to proceed with analysis or not.
SAMPLES REC'D DAY OF COLLECTION? Yes / No

IR Gun ID = 649A (Observation= 3.1 °C) (Corr.Factor -0.3 °C) (Final = 2.8 °C)

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

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

Compliance Acceptance Criteria:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

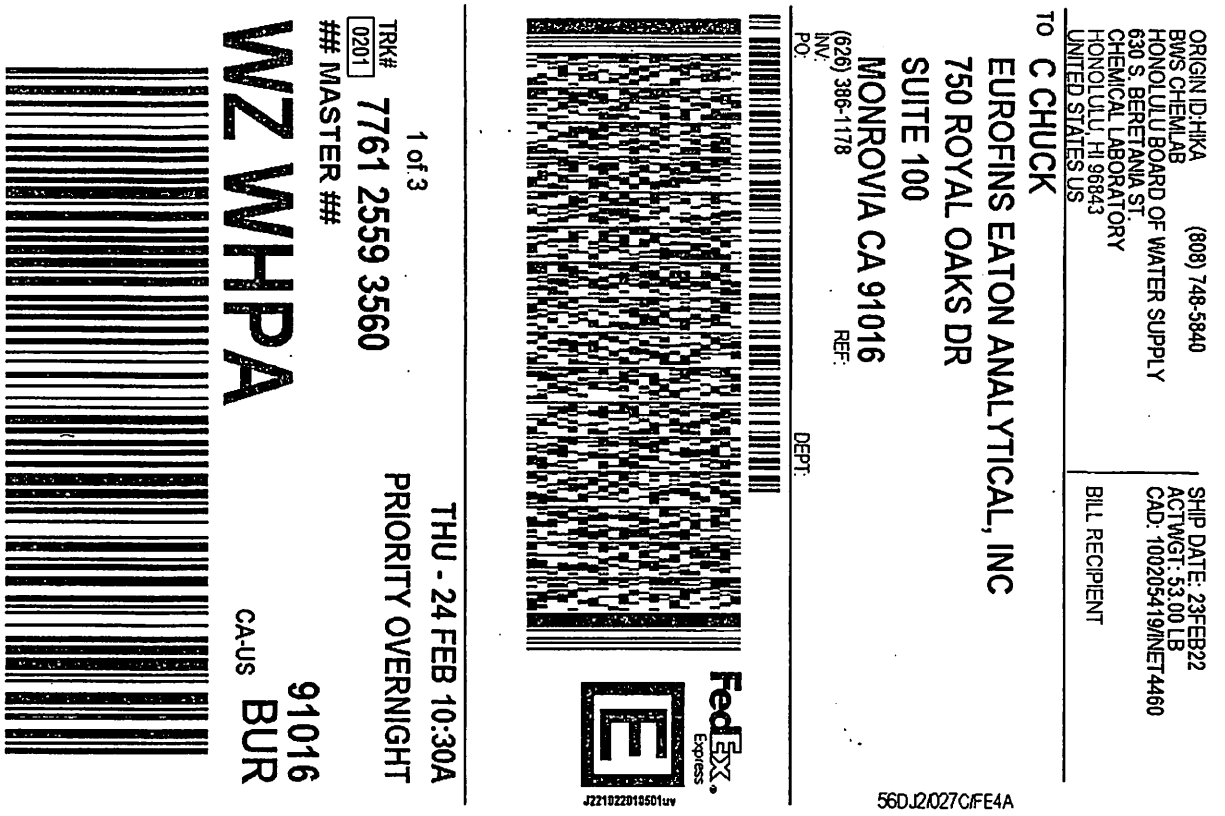
Samp ID	Bottle #	None/<6 mm	>6mm	Test

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

	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
RECEIVED BY:	[illegible]	G. REITNER	Eurofins Eaton Analytical	02-24-2022	12:08
SAMPLES CHECKED AGAINST COC BY:			Eurofins Eaton Analytical		

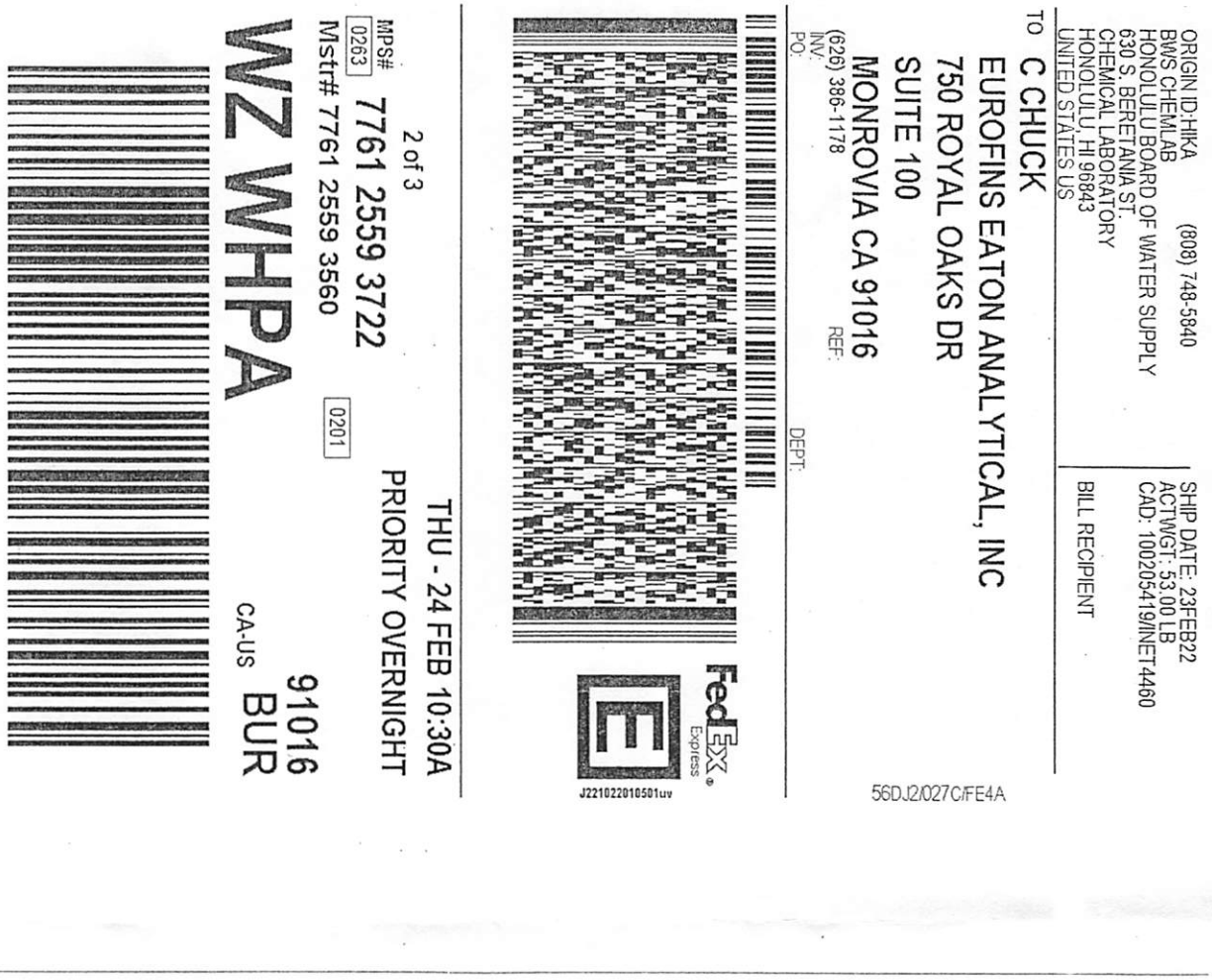
Page ___ of ___

QA FO-FRM5504 (9.28.21) Ver 9



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

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



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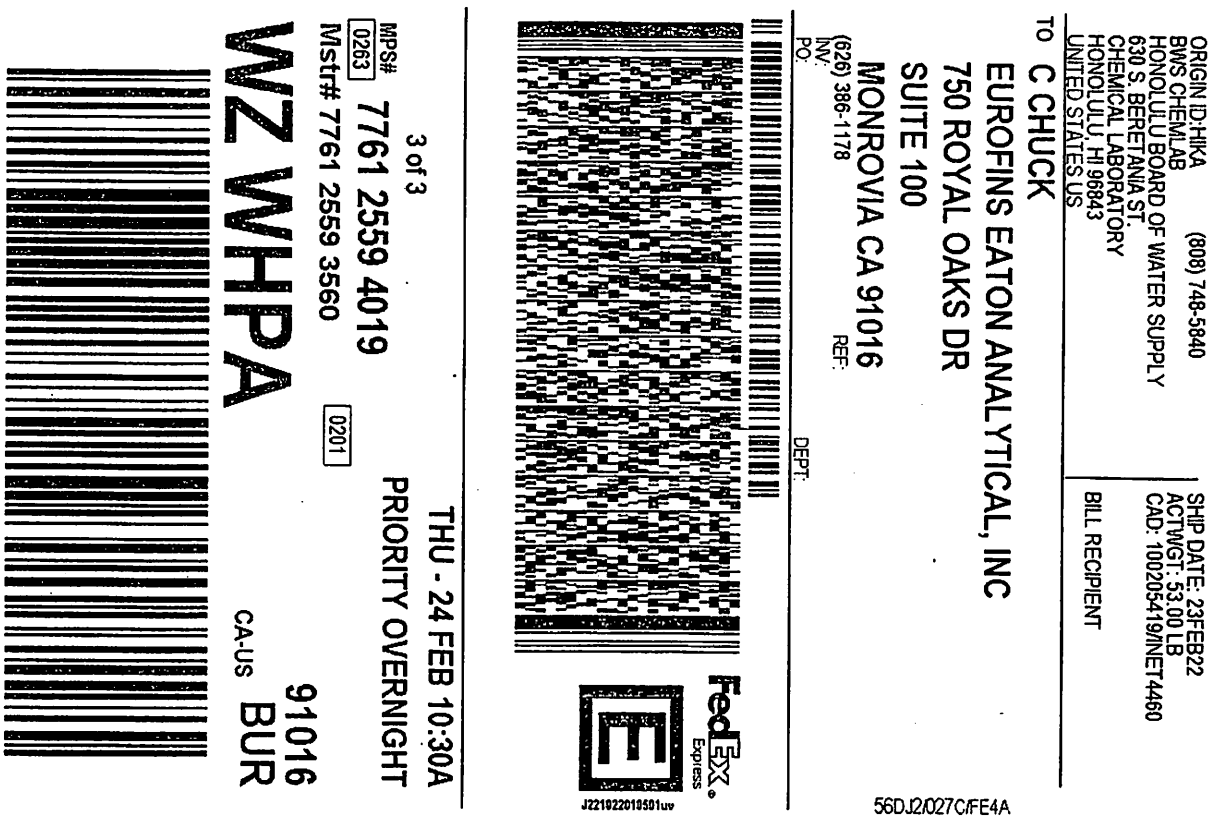

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Kit Order for BOARD OF WATER SUPPLY, CITY AND COUNTY OF

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

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

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

Note: Sampler Please return this paper with your samples

Kit #: 308898

Client ID: HONOLULU

Created By: - [AutoGenerated]
Deliver By: 01/26/2022
STG: Bottle Orders
Ice Type: G
Pre Registered

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

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

Attn: Ron Fenstemacher
Phone: 808-748-5841
Fax: 808-550-5572

Send Report to
Honolulu Board of Water Supply
630 South Beretania Street
Public Service Bldg." Room 308
Honolulu, HI 96843

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

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

Attn: Erwin Kawata
Phone: 808-748-5091
Fax: 808-550-5018

# of Sample	Tests	Bottle Qty - Type [preservative information]	Total	UN DOT #
1	TPH 8015 Diesel and Motor Oil_C, TPH 8015 Jet Fuel 5_C, TPH 8015 Jet Fuel 8_C	9 - 1L amber glass [1 ml Thio 8%]	9	
1	8015 Gas_C	3 - 40ml amber glass vial [1 drop Thio (8%)]	3	
1	@504MOD TB C, 8015 Gas_C TB	2 - 40ml amber glass vial [1 drop Thio (8%) + H20]	2	
1	@VOASDWA C plus plus TICs TBC	3 - 40ml amber glass vial [25mg AA+ H20+10 drop 1:1 HCL]	3	UN1789

Sum Tests: 4 **Sum Bottles:** 17

Comments

3rd MS/MSD

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

SAMPLER:
Eight 1 LITER AMBER GLASS BOTTLES FOR 625 SERIES AND Nine 1 LITER AMBER GLASS BOTTLES FOR TPH 8015 SERIES. THIS IS A MS/MSD SITE for 600 and 8000 series testing

SHIPPING:
Travel Blanks - TBA/MTBE, VOASDWA - Prepare TBs in the VOA LAB.
Label Cooler on TOP and right below both Handles with Site description of contents (use extra Contaienr Labels)

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

Code Status Date Shipped 01/25/2022 Via FEDEX Tracking # 549140350081 # of Coolers 1 Prepared By LKT

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

Laboratory Comments

Report: 989412
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 625 BNA are submitted by Physis Environmental in Anaheim CA

Add 625BN for BCEE February monitoring start, per Erwin Kawata.

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

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

Laboratory Hits

Report: 989412
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

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

Samples Received on:
02/24/2022 1208

Analyzed	Analyte	Sample ID	Result	HI Limit	Units	MRL

SUMMARY OF POSITIVE DATA ONLY

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

Laboratory Data

Report: 989412
Project: RED-HILL
Group: Red-Hill Expanded List (Albuquerque+)

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

Samples Received on:
02/24/2022 1208

Prepped	Analyzed	Prep Batch	Analytical Batch	Method	Analyte	Result	Units	MRL	Dilution
MOANALUA WELLS (331-223-TP202) (202202240770)							**Sampled on 02/22/2022 0930**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
02/25/22	02/25/22 20:20			(SW 8015B)	(SUB)Gas Fraction Hydrocarbons	ND	mg/L	0.02	1
				SW 8015B - TPH 8015 Diesel and Motor Oil					
02/28/22	03/01/22 18:56			(SW 8015B)	TPH Diesel	ND	mg/L	0.028	1
02/28/22	03/01/22 18:56			(SW 8015B)	TPH Motor Oil	ND	mg/L	0.056	1
				EPA 8015 - Jet Fuel 5 C8-C18					
02/28/22	03/01/22 18:56			(EPA 8015)	Jet Fuel 5	ND	mg/L	0.056	1
				EPA 8015 - Jet Fuel 8 C8-C18					
	03/01/22 18:56			(EPA 8015)	Jet Fuel 8	ND	mg/L	0.056	1
				EPA 625 - 625 Base Neutral Extractable in ug/L					
	03/24/22 00:00			(EPA 625)	2-Chloronaphthalene	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	2-Nitroaniline	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	3-Nitroaniline	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	4-Bromophenylphenyl Ether	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	4-Chlorophenylphenyl Ether	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	4-Nitroaniline	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Aniline	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Benzidine	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	bis(2-Chloroethoxy)methane	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	bis(2-Chloroethyl)ether	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	bis(2-Chloroisopropyl) ether	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Dibenzofuran	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Disalicylidenepropanediamine	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Hexachloroethane	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	Nitrobenzene	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	N-Nitrosodi-N-propylamine	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	N-Nitrosodiphenylamine	ND	ug/L	0.1	1
	03/24/22 00:00			(EPA 625)	p-Chloroaniline	ND	ug/L	0.1	1
TRAVEL BLANK (202202240774)							**Sampled on 02/22/2022 0930**		
				SW 8015B - (SUB)Gas Fraction Hydrocarbons					
02/25/22	02/25/22 22:09			(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.

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

April 13, 2022

Debbie Frank
Eurofins Eaton Analytical
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016-

Project Name: Folder # 989412 Job # 1000014
Physis Project ID: 1407003-224

Dear Debbie,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 2/28/2022. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was analyzed for:

Organics
Base/Neutral Extractable Compounds by EPA 625.1

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-224

Folder # 989412 Job # 1000014

Total Samples: 1

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
95480	202202240770	MOANALUA WELLS (331-223-TP202)	2/22/2022	9:30	Samplewater	Not Specified

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ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

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QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS1/MS2, BS1/BS2, LCS1/LCS2, LCM1/LCM2, CRM1/CRM2, surrogate spikes and/or replicate project sample analysis (R1/R2) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

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the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

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PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

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CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

ND

MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported are ND at the RL.

ANALYTICAL REPORT

PHYSIS Project ID: 1407003-224
Client: Eurofins Eaton Analytical
Project: Folder # 989412 Job # 1000014

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 95480-R1	**202202240770 MOANALUA WELLS**	**Matrix: Samplewater**					**Sampled: 22-Feb-22 9:30**			**Received: 28-Feb-22**	
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
D benzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22

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QUALITY CONTROL REPORT

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 95479-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-35094	Prepared: 01-Mar-22					Analyzed: 24-Mar-22	
2-Chloronaphthalene	Total	ND	1	0.05	0.1	µg/L							
2-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
3-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Bromophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Chloroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Chlorophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
Aniline	Total	ND	1	0.05	0.1	µg/L							
Benzidine	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethoxy) methane	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethyl) ether	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroisopropyl) ether	Total	ND	1	0.05	0.1	µg/L							
Dibenzofuran	Total	ND	1	0.05	0.1	µg/L							
Hexachloroethane	Total	ND	1	0.05	0.1	µg/L							
Nitrobenzene	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodi-n-propylamine	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodiphenylamine	Total	ND	1	0.05	0.1	µg/L							

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Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 95479-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**	
	Method: EPA 625.1					Batch ID: O-35094		Prepared: 01-Mar-22				Analyzed: 24-Mar-22	
2-Chloronaphthalene	Total	0.806	1	0.05	0.1	µg/L	1	0	81	53 - 130%	PASS		
2-Nitroaniline	Total	0.775	1	0.05	0.1	µg/L	1	0	77	69 - 114%	PASS		
3-Nitroaniline	Total	0.864	1	0.05	0.1	µg/L	1	0	86	23 - 137%	PASS		
4-Bromophenylphenyl ether	Total	0.918	1	0.05	0.1	µg/L	1	0	92	61 - 132%	PASS		
4-Chloroaniline	Total	1.09	1	0.05	0.1	µg/L	1	0	109	50 - 150%	PASS		
4-Chlorophenylphenyl ether	Total	0.885	1	0.05	0.1	µg/L	1	0	88	63 - 130%	PASS		
4-Nitroaniline	Total	0.708	1	0.05	0.1	µg/L	1	0	71	10 - 159%	PASS		
Aniline	Total	0.738	1	0.05	0.1	µg/L	1	0	74	50 - 150%	PASS		
Benzidine	Total	96.3	1	0.05	0.1	µg/L	100	0	96	0 - 125%	PASS		
Bis(2-Chloroethoxy) methane	Total	0.797	1	0.05	0.1	µg/L	1	0	80	66 - 122%	PASS		
Bis(2-Chloroethyl) ether	Total	0.738	1	0.05	0.1	µg/L	1	0	74	43 - 127%	PASS		
Bis(2-Chloroisopropyl) ether	Total	0.759	1	0.05	0.1	µg/L	1	0	76	49 - 128%	PASS		
Dibenzofuran	Total	0.857	1	0.05	0.1	µg/L	1	0	86	50 - 150%	PASS		
Hexachloroethane	Total	0.665	1	0.05	0.1	µg/L	1	0	67	27 - 130%	PASS		
Nitrobenzene	Total	0.674	1	0.05	0.1	µg/L	1	0	67	54 - 111%	PASS		
N-Nitrosodi-n-propylamine	Total	0.649	1	0.05	0.1	µg/L	1	0	65	61 - 152%	PASS		
N-Nitrosodiphenylamine	Total	0.85	1	0.05	0.1	µg/L	1	0	85	49 - 142%	PASS		

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Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 95479-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**				**Received:**		
	Method: EPA 625.1					Batch ID: O-35094		Prepared: 01-Mar-22				Analyzed: 24-Mar-22		
2-Chloronaphthalene	Total	0.786	1	0.05	0.1	µg/L	1	0	79	53 - 130%	PASS	2	30	PASS
2-Nitroaniline	Total	0.791	1	0.05	0.1	µg/L	1	0	79	69 - 114%	PASS	1	30	PASS
3-Nitroaniline	Total	1.1	1	0.05	0.1	µg/L	1	0	110	23 - 137%	PASS	24	30	PASS
4-Bromophenylphenyl ether	Total	0.922	1	0.05	0.1	µg/L	1	0	92	61 - 132%	PASS	0	30	PASS
4-Chloroaniline	Total	1.08	1	0.05	0.1	µg/L	1	0	108	50 - 150%	PASS	1	30	PASS
4-Chlorophenylphenyl ether	Total	0.892	1	0.05	0.1	µg/L	1	0	89	63 - 130%	PASS	1	30	PASS
4-Nitroaniline	Total	0.77	1	0.05	0.1	µg/L	1	0	77	10 - 159%	PASS	8	30	PASS
Aniline	Total	0.761	1	0.05	0.1	µg/L	1	0	76	50 - 150%	PASS	3	30	PASS
Benzidine	Total	96.5	1	0.05	0.1	µg/L	100	0	96	0 - 125%	PASS	0	30	PASS
Bis(2-Chloroethoxy) methane	Total	0.785	1	0.05	0.1	µg/L	1	0	79	66 - 122%	PASS	3	30	PASS
Bis(2-Chloroethyl) ether	Total	0.761	1	0.05	0.1	µg/L	1	0	76	43 - 127%	PASS	3	30	PASS
Bis(2-Chloroisopropyl) ether	Total	0.75	1	0.05	0.1	µg/L	1	0	75	49 - 128%	PASS	1	30	PASS
Dibenzofuran	Total	0.848	1	0.05	0.1	µg/L	1	0	85	50 - 150%	PASS	1	30	PASS
Hexachloroethane	Total	0.657	1	0.05	0.1	µg/L	1	0	66	27 - 130%	PASS	0	30	PASS
Nitrobenzene	Total	0.657	1	0.05	0.1	µg/L	1	0	66	54 - 111%	PASS	2	30	PASS
N-Nitrosodi-n-propylamine	Total	0.732	1	0.05	0.1	µg/L	1	0	73	61 - 152%	PASS	12	30	PASS
N-Nitrosodiphenylamine	Total	0.856	1	0.05	0.1	µg/L	1	0	86	49 - 142%	PASS	1	30	PASS

CHAIN OF CUSTODY

eurofins | Eaton Analytical

Submittal Form

Date: 2/28/2022

*REPORTING REQUIRMENTS: *Do Not Combine Reports with any other samples submitted under different Folder Numbers!*
Report & Invoice must have the Folder # **989412** 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.

Ship To:
`Physis Environmental Laboratories, Inc
1904 East Wright Circle

Anaheim, CA 92806-6028

Phone: 714-602-5320 Fax:

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

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

Samples from: **HAWAII**

Physis - 8 containers per sample for MS/MSD batch QC. Only report to RL and place a comment in the report stating RL reporting only

TICs needed

Folder #: **989412**
Report Due: **03/01/2022**

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID
202202240770	MOANALUA WELLS (331-223-TP202)	02/22/22 0930	DW		JLS

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

Method	Prep Method	Analysis Requested
EPA 625	EPA 625	625 Base Neutral Extractable in ug/L

Relinquished by: Sample Control Date 2/28/22 Time 1345

Received by: Date 2/28/22 Time 1345

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS

An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Relinquished by: Sample Control Date _____ Time _____

Received by: Date _____ Time _____

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.

Project Iteration ID: 1407003-224
Client Name: Eurofins Eaton Analytical
Project Name: Folder # 989412 Job # 1000014
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: [initials]
2. Date Received: 2/28/22
3. Time Received: _____
4. Client Name: Eurofins
5. Courier Information: (Please circle)
   - Client
   - UPS
   - Area Fast
   - DRS
   - FedEx
   - GSO/GLS
   - Ontrac
   - PAMS
   - PHYSIS Driver:
     i. Start Time: _____
     ii. End Time: _____
     iii. Total Mileage: _____
     iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
   - 1 Cooler
   - __ Styrofoam Cooler
   - ____ Boxes
   - None
   - ___ Carboy(s)
   - __Carboy Trash Can(s)
   - ____ Carboy Cap(s)
   - Other _____
7. What type of ice was used: (Please circle any that apply)
   - Wet Ice
   - Blue Ice
   - Dry Ice
   - Water
   - None
8. Randomly Selected Samples Temperature (°C): 3.4 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [initials]

Sample Integrity Upon Receipt:

1.	COC(s) included and completely filled out	Yes	No
2.	All sample containers arrived intact	Yes	No
3.	All samples listed on COC(s) are present	Yes	No
4.	Information on containers consistent with information on COC(s)	Yes	No
5.	Correct containers and volume for all analyses indicated	Yes	No
6.	All samples received within method holding time	Yes	No
7.	Correct preservation used for all analyses indicated	Yes	No
8.	Name of sampler included on COC(s)	Yes	No

Notes:

On Eurofins label it says 20211227 0011:7
20211227 0011:11

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

Date: 03-10-2022
EMAX Batch No.: 22B260

Attn: Jackie Contreras

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

Subject: Laboratory Report
Project: 989412

Enclosed is the Laboratory report for samples received on 02/25/22.
The data reported relate only to samples listed below :

Sample ID	Control #	Col Date	Matrix	Analysis
202202240770	B260-01	02/22/22	WATER	TPH GASOLINE
				TPH
202202240774	B260-02	02/22/22	WATER	TPH GASOLINE
202202240770MS	B260-01M	02/22/22	WATER	TPH GASOLINE
				TPH
202202240770MSD	B260-01S	02/22/22	WATER	TPH GASOLINE
				TPH

The results are summarized on the following pages.

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

Sincerely yours,

Caspar J. Pang
Laboratory Director

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

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

eurofins | Eaton Analytical

22B260

Submittal Form

Date: 2/25/2022

REPORTING REQUIRMENTS:** ***Do Not Combine Reports with any other samples submitted under different Folder Numbers!
Report & Invoice must have the Folder # **989412** 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.

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

Torrance, CA 90505

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

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

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

2-3 day rush

Folder #: 989412
Report Due: 03/01/2022

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
1 202202240770	MOANALUA WELLS (331-223-TP202)	02/22/22	0930 DW			JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:		Static ID:	

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

Sample ID	Client Sample ID for reference onl	Sample Date & Time	Matrix	Clip Code	PWSID	
2 202202240774	TRAVEL BLANK	02/22/22	0930 DW			JLS
Sample type:	Sample Event:	Facility ID:	Sample Point ID:		Static ID:	

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

Relinquished by: _____ Sample Control G. REITMEIER Date 022522 Time _____
Received by: Charles Nelson Date 02/25/22 Time 11:30
Relinquished by: Sample Control Charles Nelson Date 2/25/22 Time 1:08pm
Received by: SHOWN Zamora Date 2/25/22 Time 13:08

NOTIFICATION REQUIRED IF RECEIVED OUTSIDE OF 0-6 CELSIUS
An Acknowledgement of Receipt is requested to attn: Jackie Contreras

Temp c1 1.2/0.7
c2 3.0/2.5
c3 1.8/1.3

SAMPLE RECEIPT FORM 1

Reference: Addendum SM02.11.1
Form: SM02F1

Type of Delivery	Airbill / Tracking Number	ECN 22B260
☐ Fedex ☐ UPS ☐ GSO ☐ Others		Recipient JHowin Zamora
☐ EMAX Courier ☑ Client Delivery		Date 2/25/25 Time 1308

COC INSPECTION

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

Note:

PACKAGING INSPECTION

Container *Correction	☑ Cooler	☐ Box	☐ Other		
Condition factor	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging -0.5	☑ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐
Temperatures (Cool, ≤6 °C but not frozen)	☑ Cooler 1 12/0.7 °C	☑ Cooler 2 3.0/2.5 °C	☑ Cooler 3 1.8/1.3 °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☑ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C
Thermometer:	A - S/N ~~210191066~~ @ 14/14	B - S/N 210271396	C S/N 210271399	D - S/N ____	

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

Note:

DISCREPANCIES

LabSampleID	LabSampleContainerID	Code	ClientSample Label ID / Information	Corrective Action

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

NOTES/OBSERVATIONS:

LEGEND:

☐ **Continue to next page.**

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

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

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

REVIEWS:

Sample Labeling JHowin Zamora
Date 2/25/25

SRF
Date 2/25/25

PM
Date 2/28/22

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

989412

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

SDG#: 22B260

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 989412

SDG : 22B260

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

A total of two(2) water samples were received on 02/25/22 to be analyzed for Total Petroleum Hydrocarbons by Purge and Trap in accordance with Method 5030B/8015B and project specific requirements.

Holding Time
Samples were analyzed within the prescribed holding time.

Calibration
Multi-calibration points were generated to establish initial calibration (ICAL). ICAL was verified using a secondary source (ICV). Continuing calibration (CCV) verifications were carried out on a frequency specified by the project. All calibration requirements were within acceptance criteria. Refer to calibration summary forms of ICAL, ICV and CCV for details. MRL was analyzed as required by the project. 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. VG39B13B - 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. VG39B13L/VG39B13C 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 B260-01M/B260-01S. 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 : 989412

SDG NO. : 22B260
Instrument ID : GCT039

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	VG39B13B	1	NA	02/25/2213:40	02/25/2213:40	EB25004A	EB25003A	22VG39B13	Method Blank
LCS1W	VG39B13L	1	NA	02/25/2214:16	02/25/2214:16	EB25005A	EB25003A	22VG39B13	Lab Control Sample (LCS)
LCD1W	VG39B13C	1	NA	02/25/2214:52	02/25/2214:52	EB25006A	EB25003A	22VG39B13	LCS Duplicate
202202240770	B260-01	1	NA	02/25/2220:20	02/25/2220:20	EB25015A	EB25013A	22VG39B13	Field Sample
202202240770MS	B260-01M	1	NA	02/25/2220:56	02/25/2220:56	EB25016A	EB25013A	22VG39B13	Matrix Spike Sample (MS)
202202240770MSD	B260-01S	1	NA	02/25/2221:33	02/25/2221:33	EB25017A	EB25013A	22VG39B13	MS Duplicate (MSD)
202202240774	B260-02	1	NA	02/25/2222:09	02/25/2222:09	EB25018A	EB25013A	22VG39B13	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:	02/22/22 09:30
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/25/22 20:20
Sample ID	: 202202240770	Date Analyzed:	02/25/22 20:20
Lab Samp ID:	B260-01	Dilution Factor:	1
Lab File ID:	EB25015A	Matrix:	WATER
Ext Btch ID:	22VG39B13	% Moisture:	NA
Calib. Ref.:	EB25013A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0321	0.0400	80	60-140

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

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

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/22/22 09:30
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/25/22 22:09
Sample ID	: 202202240774	Date Analyzed:	02/25/22 22:09
Lab Samp ID:	B260-02	Dilution Factor:	1
Lab File ID:	EB25018A	Matrix:	WATER
Ext Btch ID:	22VG39B13	% Moisture:	NA
Calib. Ref.:	EB25013A	Instrument ID:	39

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

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromofluorobenzene	0.0321	0.0400	80	60-140

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

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

QC SUMMARIES

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

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/25/22 13:40
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/25/22 13:40
Sample ID	: MBLK1W	Date Analyzed:	02/25/22 13:40
Lab Samp ID:	VG39B13B	Dilution Factor:	1
Lab File ID:	EB25004A	Matrix:	WATER
Ext Btch ID:	22VG39B13	% Moisture:	NA
Calib. Ref.:	EB25003A	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	0.0322	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

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: MBLK1W	LCS1W	LCD1W
LAB SAMPLE ID	: VG39B13B	VG39B13L	VG39B13C
LAB FILE ID	: EB25004A	EB25005A	EB25006A
DATE PREPARED	: 02/25/22 13:40	02/25/22 14:16	02/25/22 14:52
DATE ANALYZED	: 02/25/22 13:40	02/25/22 14:16	02/25/22 14:52
PREP BATCH	: 22VG39B13	22VG39B13	22VG39B13
CALIBRATION REF	: EB25003A	EB25003A	EB25003A

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	0.429	86	0.500	0.429	86	0	60-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	SpikeAmt (mg/L)	LCDResult (mg/L)	LCDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0406	102	0.0400	0.0409	102	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 : 989412
BATCH NO. : 22B260
METHOD : 5030B/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202240770	202202240770MS	202202240770MSD
LAB SAMPLE ID	: B260-01	B260-01M	B260-01S
LAB FILE ID	: EB25015A	EB25016A	EB25017A
DATE PREPARED	: 02/25/22 20:20	02/25/22 20:56	02/25/22 21:33
DATE ANALYZED	: 02/25/22 20:20	02/25/22 20:56	02/25/22 21:33
PREP BATCH	: 22VG39B13	22VG39B13	22VG39B13
CALIBRATION REF	: EB25013A	EB25013A	EB25013A

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	0.495	99	0.500	0.498	100	1	50-130	30

SURROGATE PARAMETER	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromofluorobenzene	0.0400	0.0410	103	0.0400	0.0426	107	60-140

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

LABORATORY REPORT FOR

EUROFINS EATON ANALYTICAL

989412

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

SDG#: 22B260

CASE NARRATIVE

Client : EUROFINS EATON ANALYTICAL

Project: 989412

SDG : 22B260

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/25/22 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. DSB035WB - 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 DSB035WL. 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 22B260-01M/22B260-01S. 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: 989412

SDG : 22B260

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/25/22 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. DSB035WB - 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 J5B035WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP5 was within MS QC limits in 22B260-01M/22B260-01S. 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: 989412

SDG : 22B260

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

One(1) water sample was received on 02/25/22 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. DSB035WB - 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 J8B035WL. Refer to LCS summary form for details.

Matrix QC Sample
Matrix spike sample was prepared and analyzed at a frequency required by the project. For this SDG, one(1) set of MS/MSD was analyzed. JP8 was within MS QC limits in 22B260-01M/22B260-01S. Refer to Matrix QC summary form for details.

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

Sample Analysis
The sample was analyzed according to prescribed analytical procedures. Results were evaluated in accordance to project requirements. For this SDG, all quality control requirements were met.

LAB CHRONICLE
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 989412

SDG NO. : 22B260
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSB035WB	1	NA	03/01/2217:05	02/28/2214:15	LC01011A	LC01004A	22DSB035W	Method Blank
LCS1W	DSB035WL	1	NA	03/01/2217:24	02/28/2214:15	LC01012A	LC01004A	22DSB035W	Lab Control Sample (LCS)
202202240770	B260-01	1	NA	03/01/2218:56	02/28/2214:15	LC01017A	LC01004A	22DSB035W	Field Sample
202202240770MS	B260-01M	1	NA	03/01/2219:14	02/28/2214:15	LC01018A	LC01004A	22DSB035W	Matrix Spike Sample (MS)
202202240770MSD	B260-01S	1	NA	03/01/2219:32	02/28/2214:15	LC01019A	LC01004A	22DSB035W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 989412

SDG NO. : 22B260
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSB035WB	1	NA	03/01/2217:05	02/28/2214:15	LC01011A	LC01005A	22DSB035W	Method Blank
LCS1W	J5B035WL	1	NA	03/01/2217:42	02/28/2214:15	LC01013A	LC01005A	22DSB035W	Lab Control Sample (LCS)
202202240770	B260-01	1	NA	03/01/2218:56	02/28/2214:15	LC01017A	LC01005A	22DSB035W	Field Sample
202202240770MS	B260-01M	1	NA	03/01/2219:50	02/28/2214:15	LC01020A	LC01005A	22DSB035W	Matrix Spike Sample (MS)
202202240770MSD	B260-01S	1	NA	03/01/2220:09	02/28/2214:15	LC01021A	LC01005A	22DSB035W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

LAB CHRONICLE
PETROLEUM HYDROCARBONS BY EXTRACTION

Client : EUROFINS EATON ANALYTICAL
Project : 989412

SDG NO. : 22B260
Instrument ID : D5

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	DSB035WB	1	NA	03/01/2217:05	02/28/2214:15	LC01011A	LC01006A	22DSB035W	Method Blank
LCS1W	J8B035WL	1	NA	03/01/2218:00	02/28/2214:15	LC01014A	LC01006A	22DSB035W	Lab Control Sample (LCS)
202202240770	B260-01	1	NA	03/01/2218:56	02/28/2214:15	LC01017A	LC01006A	22DSB035W	Field Sample
202202240770MS	B260-01M	1	NA	03/01/2220:27	02/28/2214:15	LC01022A	LC01006A	22DSB035W	Matrix Spike Sample (MS)
202202240770MSD	B260-01S	1	NA	03/01/2220:46	02/28/2214:15	LC01023A	LC01006A	22DSB035W	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/22/22 09:30
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: 202202240770	Date Analyzed:	03/01/22 18:56
Lab Samp ID:	22B260-01	Dilution Factor:	1
Lab File ID:	LC01017A	Matrix:	WATER
Ext Btch ID:	22DSB035W	% Moisture:	NA
Calib. Ref.:	LC01004A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Diesel	ND	0.028	0.014
Motor Oil	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.560	71	60-130
Hexacosane	0.150	0.140	107	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	: 890ml	Final Volume :	5ml
Prepared by	: JMuert	Analyzed by :	SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/22/22 09:30
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: 202202240770	Date Analyzed:	03/01/22 18:56
Lab Samp ID:	22B260-01	Dilution Factor:	1
Lab File ID:	LC01017A	Matrix:	WATER
Ext Btch ID:	22DSB035W	% Moisture:	NA
Calib. Ref.:	LC01005A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP5	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.560	71	60-130
Hexacosane	0.150	0.140	107	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 : 890ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/22/22 09:30
Project	: 989412	Date Received:	02/25/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: 202202240770	Date Analyzed:	03/01/22 18:56
Lab Samp ID:	22B260-01	Dilution Factor:	1
Lab File ID:	LC01017A	Matrix:	WATER
Ext Btch ID:	22DSB035W	% Moisture:	NA
Calib. Ref.:	LC01006A	Instrument ID:	D5

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
JP8	ND	0.056	0.028

SURROGATE PARAMETERS	RESULT	SPK_AMT	%RECOVERY	QC LIMIT
Bromobenzene	0.399	0.560	71	60-130
Hexacosane	0.150	0.140	107	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 : 890ml Final Volume : 5ml
Prepared by : JMuert Analyzed by : SDeeso

QC SUMMARIES

METHOD 3520C/8015B
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/28/22 14:15
Project	: 989412	Date Received:	02/28/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: MBLK1W	Date Analyzed:	03/01/22 17:05
Lab Samp ID	: DSB035WB	Dilution Factor:	1
Lab File ID	: LC01011A	Matrix:	WATER
Ext Btch ID	: 22DSB035W	% Moisture:	NA
Calib. Ref.	: LC01004A	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	0.311	0.500	62	60-130
Hexacosane	0.121	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	: JMuert	Analyzed by	: SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB035WB	DSB035WL
LAB FILE ID	: LC01011A	LC01012A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 17:05	03/01/22 17:24
PREP BATCH	: 22DSB035W	22DSB035W
CALIBRATION REF	: LC01004A	LC01004A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Diesel	ND	2.50	2.43	97	50-130

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.367	73	60-130
Hexacosane	0.125	0.139	111	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202240770	202202240770MS	202202240770MSD
LAB SAMPLE ID	: 22B260-01	22B260-01M	22B260-01S
LAB FILE ID	: LC01017A	LC01018A	LC01019A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 18:56	03/01/22 19:14	03/01/22 19:32
PREP BATCH	: 22DSB035W	22DSB035W	22DSB035W
CALIBRATION REF	: LC01004A	LC01004A	LC01004A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
Diesel	ND	2.88	2.83	98	2.85	2.84	100	0	50-130	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.575	0.491	85	0.570	0.479	84	60-130
Hexacosane	0.144	0.160	111	0.142	0.159	112	60-130

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

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/28/22 14:15
Project	: 989412	Date Received:	02/28/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: MBLK1W	Date Analyzed:	03/01/22 17:05
Lab Samp ID:	DSB035WB	Dilution Factor:	1
Lab File ID:	LC01011A	Matrix:	WATER
Ext Btch ID:	22DSB035W	% Moisture:	NA
Calib. Ref.:	LC01005A	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	0.311	0.500	62	60-130
Hexacosane	0.121	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB035WB	J5B035WL
LAB FILE ID	: LC01011A	LC01013A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 17:05	03/01/22 17:42
PREP BATCH	: 22DSB035W	22DSB035W
CALIBRATION REF	: LC01005A	LC01005A

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	0.397	79	60-130
Hexacosane	0.125	0.134	107	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202240770	202202240770MS	202202240770MSD
LAB SAMPLE ID	: 22B260-01	22B260-01M	22B260-01S
LAB FILE ID	: LC01017A	LC01020A	LC01021A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 18:56	03/01/22 19:50	03/01/22 20:09
PREP BATCH	: 22DSB035W	22DSB035W	22DSB035W
CALIBRATION REF	: LC01005A	LC01005A	LC01005A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP5	ND	2.62	2.94	112	2.65	2.99	113	2	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.525	0.480	91	0.530	0.461	87	60-130
Hexacosane	0.131	0.137	104	0.132	0.143	108	60-130

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

METHOD 3520C/8015B
PETROLEUM HYDROCARBONS BY EXTRACTION

Client	: EUROFINS EATON ANALYTICAL	Date Collected:	02/28/22 14:15
Project	: 989412	Date Received:	02/28/22
Batch No.	: 22B260	Date Extracted:	02/28/22 14:15
Sample ID	: MBLK1W	Date Analyzed:	03/01/22 17:05
Lab Samp ID:	DSB035WB	Dilution Factor:	1
Lab File ID:	LC01011A	Matrix:	WATER
Ext Btch ID:	22DSB035W	% Moisture:	NA
Calib. Ref.:	LC01006A	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	0.311	0.500	62	60-130
Hexacosane	0.121	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 : JMuert Analyzed by : SDeeso

EMAX QUALITY CONTROL DATA
LAB CONTROL SAMPLE ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER	% MOISTURE:NA
DILUTION FACTOR	: 1	1
SAMPLE ID	: MBLK1W	LCS1W
LAB SAMPLE ID	: DSB035WB	J8B035WL
LAB FILE ID	: LC01011A	LC01014A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 17:05	03/01/22 18:00
PREP BATCH	: 22DSB035W	22DSB035W
CALIBRATION REF	: LC01006A	LC01006A

ACCESSION:

PARAMETERS	MBResult (mg/L)	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
JP8	ND	2.50	2.05	82	30-160

SURROGATE PARAMETERS	SpikeAmt (mg/L)	LCSResult (mg/L)	LCSRec (%)	QCLimit (%)
Bromobenzene	0.500	0.453	91	60-130
Hexacosane	0.125	0.131	105	60-130

MB: Method Blank sample LCS: Lab Control Sample

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT : EUROFINS EATON ANALYTICAL
PROJECT : 989412
BATCH NO. : 22B260
METHOD : 3520C/8015B

MATRIX	: WATER		% MOISTURE:NA
DILUTION FACTOR	: 1	1	1
SAMPLE ID	: 202202240770	202202240770MS	202202240770MSD
LAB SAMPLE ID	: 22B260-01	22B260-01M	22B260-01S
LAB FILE ID	: LC01017A	LC01022A	LC01023A
DATE PREPARED	: 02/28/22 14:15	02/28/22 14:15	02/28/22 14:15
DATE ANALYZED	: 03/01/22 18:56	03/01/22 20:27	03/01/22 20:46
PREP BATCH	: 22DSB035W	22DSB035W	22DSB035W
CALIBRATION REF	: LC01006A	LC01006A	LC01006A

ACCESSION:

PARAMETERS	PSResult (mg/L)	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	RPD (%)	QCLimit (%)	MaxRPD (%)
JP8	ND	2.62	2.47	94	2.60	2.76	106	11	30-160	30

SURROGATE PARAMETERS	SpikeAmt (mg/L)	MSResult (mg/L)	MSRec (%)	SpikeAmt (mg/L)	MSDResult (mg/L)	MSDRec (%)	QCLimit (%)
Bromobenzene	0.525	0.512	98	0.520	0.504	97	60-130
Hexacosane	0.131	0.133	101	0.130	0.143	110	60-130

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

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

April 13, 2022

Debbie Frank
Eurofins Eaton Analytical
750 Royal Oaks Drive
Suite 100
Monrovia, CA 91016-

Project Name: Folder # 989412 Job # 1000014
Physis Project ID: 1407003-224

Dear Debbie,

Enclosed are the analytical results for the sample submitted to PHYSIS Environmental Laboratories, Inc. (PHYSIS) on 2/28/2022. A total of 1 sample was received for analysis in accordance with the attached chain of custody (COC). Per the COC, the sample was analyzed for:

Organics
Base/Neutral Extractable Compounds by EPA 625.1

Analytical results in this report apply only to samples submitted to PHYSIS in accordance with the COC and are intended to be considered in their entirety.

Please feel free to contact me at any time with any questions. PHYSIS appreciates the opportunity to provide you with our analytical and support services.

Regards,

Misty Mercier
714 602-5320
Extension 202
mistymercier@physislabs.com

PHYSIS
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ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PROJECT SAMPLE LIST

Eurofins Eaton Analytical

PHYSIS Project ID: 1407003-224

Folder # 989412 Job # 1000014

Total Samples: 1

PHYSIS ID	Sample ID	Description	Date	Time	Matrix	Sample Type
95480	202202240770	MOANALUA WELLS (331-223-TP202)	2/22/2022	9:30	Samplewater	Not Specified

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ABBREVIATIONS and ACRONYMS

QM	Quality Manual
QA	Quality Assurance
QC	Quality Control
MDL	method detection limit
RL	reporting limit
R1	project sample
R2	project sample replicate
MS1	matrix spike
MS2	matrix spike replicate
B1	procedural blank
B2	procedural blank replicate
BS1	blank spike
BS2	blank spike replicate
LCS1	laboratory control spike
LCS2	laboratory control spike replicate
LCM1	laboratory control material
LCM2	laboratory control material replicate
CRM1	certified reference material
CRM2	certified reference material replicate
RPD	relative percent difference
LMW	low molecular weight
HMW	high molecular weight

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QUALITY ASSURANCE SUMMARY

LABORATORY BATCH: Physis' QM defines a laboratory batch as a group of 20 or fewer project samples of similar matrix, processed together under the same conditions and with the same reagents. QC samples are associated with each batch and were used to assess the validity of the sample analyses.

PROCEDURAL BLANK: Laboratory contamination introduced during method use is assessed through the preparation and analysis of procedural blanks is provided at a minimum frequency of one per batch.

ACCURACY: Accuracy of analytical measurements is the degree of closeness based on percent recovery calculations between measured values and the actual or true value and includes a combination of reproducibility error and systematic bias due to sampling and analytical operations. Accuracy of the project data was indicated by analysis of MS, BS, LCS, LCM, CRM, and/or surrogate spikes on a minimum frequency of one per batch. Physis' QM requires that 95% of the target compounds greater than 10 times the MDL be within the specified acceptance limits.

PRECISION: Precision is the agreement among a set of replicate measurements without assumption of knowledge of the true value and is based on RPD calculations between repeated values. Precision of the project data was determined by analysis of replicate MS1/MS2, BS1/BS2, LCS1/LCS2, LCM1/LCM2, CRM1/CRM2, surrogate spikes and/or replicate project sample analysis (R1/R2) on a minimum frequency of one per batch. Physis' QM requires that for 95% of the compounds greater than 10 times the MDL, the percent RPD should be within the specified acceptance range.

BLANK SPIKES: BS is the introduction of a known concentration of analyte into the procedural blank. BS demonstrates performance of the preparation and analytical methods on a clean matrix void of potential matrix related interferences. The BS is performed in laboratory deionized water, making these recoveries a better indicator of the efficiency of the laboratory method per se.

MATRIX SPIKES: MS is the introduction of a known concentration of analyte into a sample. MS samples demonstrate the effect a particular project sample matrix has on the accuracy of a measurement. Individually, MS samples also indicate the bias of analytical measurements due to chemical interferences inherent in the in the specific project sample spiked. Intrinsic target analyte concentration in the specific project sample can also significantly impact MS recovery.

CERTIFIED REFERENCE MATERIALS: CRMs are materials of various matrices for which analytical information has been determined and certified by a recognized authority. These are used to provide a quantitative assessment of the accuracy of an analytical method. CRMs provide evidence that the laboratory preparation and analysis produces results that are comparable to those obtained by an independent organization.

LABORATORY CONTROL MATERIAL: LCM is provided because a suitable natural seawater CRM is not available and can be used to indicate accuracy of the method. Physis' internal LCM is seawater collected at ~800 meters in the Southern California San Pedro Basin and can be used as a reference for background concentrations in clean, natural seawater for comparison to project samples.

LABORATORY CONTROL SPIKES: LCS is the introduction of a known concentration of analyte into Physis' LCM. LCS samples were employed to assess the effect the seawater matrix has on the accuracy of a measurement. LCS also indicate the bias of this method due to chemical interferences inherent in the in the seawater matrix. Intrinsic LCM concentration can also significantly impact LCS recovery.

SURROGATES: A surrogate is a pure analyte unlikely to be found in any project sample, behaves similarly to

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the target analyte and most often used with organic analytical procedures. Surrogates are added in known concentration to all samples and are measured to indicate overall efficiency of the method including processing and analyses.

HOLDING TIME: Method recommended holding times are the length of time a project sample can be stored under specific conditions after collection and prior to analysis without significantly affecting the analyte's concentration. Holding times can be extended if preservation techniques are employed to reduce biodegradation, volatilization, oxidation, sorption, precipitation, and other physical and chemical processes.

SAMPLE STORAGE/RETENTION: In order to maintain chemical integrity prior to analysis, all samples submitted to Physis are refrigerated (liquids) or frozen (solids) upon receipt unless otherwise recommended by applicable methods. Solid samples are retained for 1 year from collection while liquid samples are retained until method recommended holding times elapse.

TOTAL/DISSOLVED FRACTION: In some instances, the results for the dissolved fraction may be higher than the total fraction for a particular analyte (e.g. trace metals). This is typically caused by the analytical variation for each result and indicates that the target analyte is primarily in the dissolved phase, within the sample.

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PHYSIS QUALIFIER CODES

CODE	DEFINITION
#	see Case Narrative
ND	analyte not detected at or above the MDL
B	analyte was detected in the procedural blank greater than 10 times the MDL
E	analyte concentration exceeds the upper limit of the linear calibration range, reported value is estimated
H	sample received and/or analyzed past the recommended holding time
J	analyte was detected at a concentration below the RL and above the MDL, reported value is estimated
N	insufficient sample, analysis could not be performed
M	analyte was outside the specified accuracy and/or precision acceptance limits due to matrix interference. The associated B/BS were within limits, therefore the sample data was reported without further clarification
SH	analyte concentration in the project sample exceeded the spike concentration, therefore accuracy and/or precision acceptance limits do not apply
SL	analyte results were lower than 10 times the MDL, therefore accuracy and/or precision acceptance limits do not apply
NH	project sample was heterogeneous and sample homogeneity could not be readily achieved using routine laboratory practices, therefore accuracy and/or precision acceptance limits do not apply
Q	analyte was outside the specified QAPP acceptance limits for precision and/or accuracy but within Physis derived acceptance limits, therefore the sample data was reported without further clarification
R	Physis' QM allows for 5% of the target compounds greater than 10 times the MDL to be outside the specified acceptance limits for precision and/or accuracy. This is often due to random error and does not indicate any significant problems with the analysis of these project samples

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CASE NARRATIVE

QUALIFIER NOTES

In addition to the use of analyte specific Physis Qualifier Codes where applicable, the following were also noted.

ND

MDL is listed due to report format restrictions; it is not used in reporting. Analytical results reported are ND at the RL.

ANALYTICAL REPORT

PHYSIS Project ID: 1407003-224
Client: Eurofins Eaton Analytical
Project: Folder # 989412 Job # 1000014

Base/Neutral Extractable Compounds

ANALYTE	Method	Units	RESULT	DF	MDL	RL	Fraction	QA CODE	Batch ID	Date Processed	Date Analyzed
Sample ID: 95480-R1	**202202240770 MOANALUA WELLS**	**Matrix: Samplewater**					**Sampled: 22-Feb-22 9:30**			**Received: 28-Feb-22**	
2-Chloronaphthalene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
2-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
3-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Bromophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Chloroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Chlorophenylphenyl ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
4-Nitroaniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Aniline	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Benzidine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroethoxy) methane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroethyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Bis(2-Chloroisopropyl) ether	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
D benzofuran	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Hexachloroethane	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
Nitrobenzene	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
N-Nitrosodi-n-propylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22
N-Nitrosodiphenylamine	EPA 625.1	µg/L	ND	1	0.05	0.1	Total		O-35094	01-Mar-22	24-Mar-22

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QUALITY CONTROL REPORT

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 95479-B1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-35094	Prepared: 01-Mar-22					Analyzed: 24-Mar-22	
2-Chloronaphthalene	Total	ND	1	0.05	0.1	µg/L							
2-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
3-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Bromophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Chloroaniline	Total	ND	1	0.05	0.1	µg/L							
4-Chlorophenylphenyl ether	Total	ND	1	0.05	0.1	µg/L							
4-Nitroaniline	Total	ND	1	0.05	0.1	µg/L							
Aniline	Total	ND	1	0.05	0.1	µg/L							
Benzidine	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethoxy) methane	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroethyl) ether	Total	ND	1	0.05	0.1	µg/L							
Bis(2-Chloroisopropyl) ether	Total	ND	1	0.05	0.1	µg/L							
Dibenzofuran	Total	ND	1	0.05	0.1	µg/L							
Hexachloroethane	Total	ND	1	0.05	0.1	µg/L							
Nitrobenzene	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodi-n-propylamine	Total	ND	1	0.05	0.1	µg/L							
N-Nitrosodiphenylamine	Total	ND	1	0.05	0.1	µg/L							

Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS	PRECISION %	PRECISION LIMITS	QA CODEc
Sample ID: 95479-BS1	**QAQC Procedural Blank**					**Matrix: BlankMatrix**	**Sampled:**					**Received:**	
	Method: EPA 625.1					Batch ID: O-35094		Prepared: 01-Mar-22				Analyzed: 24-Mar-22	
2-Chloronaphthalene	Total	0.806	1	0.05	0.1	µg/L	1	0	81	53 - 130%	PASS		
2-Nitroaniline	Total	0.775	1	0.05	0.1	µg/L	1	0	77	69 - 114%	PASS		
3-Nitroaniline	Total	0.864	1	0.05	0.1	µg/L	1	0	86	23 - 137%	PASS		
4-Bromophenylphenyl ether	Total	0.918	1	0.05	0.1	µg/L	1	0	92	61 - 132%	PASS		
4-Chloroaniline	Total	1.09	1	0.05	0.1	µg/L	1	0	109	50 - 150%	PASS		
4-Chlorophenylphenyl ether	Total	0.885	1	0.05	0.1	µg/L	1	0	88	63 - 130%	PASS		
4-Nitroaniline	Total	0.708	1	0.05	0.1	µg/L	1	0	71	10 - 159%	PASS		
Aniline	Total	0.738	1	0.05	0.1	µg/L	1	0	74	50 - 150%	PASS		
Benzidine	Total	96.3	1	0.05	0.1	µg/L	100	0	96	0 - 125%	PASS		
Bis(2-Chloroethoxy) methane	Total	0.797	1	0.05	0.1	µg/L	1	0	80	66 - 122%	PASS		
Bis(2-Chloroethyl) ether	Total	0.738	1	0.05	0.1	µg/L	1	0	74	43 - 127%	PASS		
Bis(2-Chloroisopropyl) ether	Total	0.759	1	0.05	0.1	µg/L	1	0	76	49 - 128%	PASS		
Dibenzofuran	Total	0.857	1	0.05	0.1	µg/L	1	0	86	50 - 150%	PASS		
Hexachloroethane	Total	0.665	1	0.05	0.1	µg/L	1	0	67	27 - 130%	PASS		
Nitrobenzene	Total	0.674	1	0.05	0.1	µg/L	1	0	67	54 - 111%	PASS		
N-Nitrosodi-n-propylamine	Total	0.649	1	0.05	0.1	µg/L	1	0	65	61 - 152%	PASS		
N-Nitrosodiphenylamine	Total	0.85	1	0.05	0.1	µg/L	1	0	85	49 - 142%	PASS		

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Base/Neutral Extractable Compounds QUALITY CONTROL REPORT

ANALYTE	FRACTION	RESULT	DF	MDL	RL	UNITS	SPIKE LEVEL	SOURCE RESULT	ACCURACY %	ACCURACY LIMITS		PRECISION %	PRECISION LIMITS		QA CODEc
Sample ID: 95479-BS2	**QAQC Procedural Blank**					**Matrix: BlankMatrix**		**Sampled:**					**Received:**		
	Method: EPA 625.1					Batch ID: O-35094		Prepared: 01-Mar-22					Analyzed: 24-Mar-22		
2-Chloronaphthalene	Total	0.786	1	0.05	0.1	µg/L	1	0	79	53 - 130%	PASS	2	30	PASS	
2-Nitroaniline	Total	0.791	1	0.05	0.1	µg/L	1	0	79	69 - 114%	PASS	1	30	PASS	
3-Nitroaniline	Total	1.1	1	0.05	0.1	µg/L	1	0	110	23 - 137%	PASS	24	30	PASS	
4-Bromophenylphenyl ether	Total	0.922	1	0.05	0.1	µg/L	1	0	92	61 - 132%	PASS	0	30	PASS	
4-Chloroaniline	Total	1.08	1	0.05	0.1	µg/L	1	0	108	50 - 150%	PASS	1	30	PASS	
4-Chlorophenylphenyl ether	Total	0.892	1	0.05	0.1	µg/L	1	0	89	63 - 130%	PASS	1	30	PASS	
4-Nitroaniline	Total	0.77	1	0.05	0.1	µg/L	1	0	77	10 - 159%	PASS	8	30	PASS	
Aniline	Total	0.761	1	0.05	0.1	µg/L	1	0	76	50 - 150%	PASS	3	30	PASS	
Benzidine	Total	96.5	1	0.05	0.1	µg/L	100	0	96	0 - 125%	PASS	0	30	PASS	
Bis(2-Chloroethoxy) methane	Total	0.785	1	0.05	0.1	µg/L	1	0	79	66 - 122%	PASS	3	30	PASS	
Bis(2-Chloroethyl) ether	Total	0.761	1	0.05	0.1	µg/L	1	0	76	43 - 127%	PASS	3	30	PASS	
Bis(2-Chloroisopropyl) ether	Total	0.75	1	0.05	0.1	µg/L	1	0	75	49 - 128%	PASS	1	30	PASS	
Dibenzofuran	Total	0.848	1	0.05	0.1	µg/L	1	0	85	50 - 150%	PASS	1	30	PASS	
Hexachloroethane	Total	0.657	1	0.05	0.1	µg/L	1	0	66	27 - 130%	PASS	0	30	PASS	
Nitrobenzene	Total	0.657	1	0.05	0.1	µg/L	1	0	66	54 - 111%	PASS	2	30	PASS	
N-Nitrosodi-n-propylamine	Total	0.732	1	0.05	0.1	µg/L	1	0	73	61 - 152%	PASS	12	30	PASS	
N-Nitrosodiphenylamine	Total	0.856	1	0.05	0.1	µg/L	1	0	86	49 - 142%	PASS	1	30	PASS	

CHAIN OF CUSTODY

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Submittal Form

Date: 2/28/2022

*REPORTING REQUIRMENTS: *Do Not Combine Reports with any other samples submitted under different Folder Numbers!*
Report & Invoice must have the Folder # **989412** 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.

Ship To:
`Physis Environmental Laboratories, Inc
1904 East Wright Circle

Anaheim, CA 92806-6028

Phone: 714-602-5320 Fax:

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

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

Samples from: **HAWAII**

Physis - 8 containers per sample for MS/MSD batch QC. Only report to RL and place a comment in the report stating RL reporting only

TICs needed

Folder #: **989412**
Report Due: **03/01/2022**

Sample ID	*Client Sample ID for reference on!*	Sample Date & Time	Matrix	Clip Code	PWSID
202202240770	MOANALUA WELLS (331-223-TP202)	02/22/22 0930	DW		JLS

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

Method	Prep Method	Analysis Requested
EPA 625	EPA 625	625 Base Neutral Extractable in ug/L

Relinquished by: Sample Control Date 2/28/22 Time 1345

Received by: Date 2/28/22 Time 1345

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

750 Royal Oaks Drive, Suite 100, Monrovia, CA 91016 Tel (626) 386-1100 Fax (866) 988-3757 www.EurofinsUS.com/Eaton

PHYSIS
TERRA FAUNA FLORA AQUA AURA
ENVIRONMENTAL LABORATORIES, INC.
Innovative Solutions for Nature

PHYSIS
ENVIRONMENTAL LABORATORIES, INC.

Project Iteration ID: 1407003-224
Client Name: Eurofins Eaton Analytical
Project Name: Folder # 989412 Job # 1000014
COC Page Number: 2 of 2
Bottle Label Color: NA

Sample Receipt Summary

Receiving Info

1. Initials Received By: [signature]
2. Date Received: 2/28/22
3. Time Received: _____
4. Client Name: Eurofins
5. Courier Information: (Please circle)
   - Client
   - UPS
   - Area Fast
   - DRS
   - FedEx
   - GSO/GLS
   - Ontrac
   - PAMS
   - PHYSIS Driver:
     i. Start Time: _____
     ii. End Time: _____
     iii. Total Mileage: _____
     iv. Number of Pickups: _____
6. Container Information: (Please put the # of containers or circle none)
   - 1 Cooler
   - __ Styrofoam Cooler
   - ____ Boxes
   - None
   - ___ Carboy(s)
   - __Carboy Trash Can(s)
   - ____ Carboy Cap(s)
   - Other _____
7. What type of ice was used: (Please circle any that apply)
   - Wet Ice
   - Blue Ice
   - Dry Ice
   - Water
   - None
8. Randomly Selected Samples Temperature (°C): 3.4 Used I/R Thermometer # 1-2

Inspection Info

1. Initials Inspected By: [signature]

Sample Integrity Upon Receipt:

1.	COC(s) included and completely filled out	Yes	No
2.	All sample containers arrived intact	Yes	No
3.	All samples listed on COC(s) are present	Yes	No
4.	Information on containers consistent with information on COC(s)	Yes	No
5.	Correct containers and volume for all analyses indicated	Yes	No
6.	All samples received within method holding time	Yes	No
7.	Correct preservation used for all analyses indicated	Yes	No
8.	Name of sampler included on COC(s)	Yes	No

Notes:

On Eurofins label it says 20211227 0011:7
20211227 0011:11