ANALYTICAL SUMMARY REPORT

March 31, 2022

AECOM - Honolulu
1001 Bishop Street, Suite 1600
Honolulu HI, 96813-3698

Work Order: B22031470 Quote ID: 5912

Project Name: CV18F0126, 60571032.02.46.01

Energy Laboratories Inc Billings MT received the following 67 samples from AECOM - Honolulu on 3/19/2022 for analysis.

Lab ID	Client Sample ID	Collect Date	Received Date	Matrix	Test
B22031470-001	ERH2833 (RHMW06)	03/16/22 16:30	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-002	ERH2832 (Trip Blank)-14894	03/16/22 16:30	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-003	ERH2832 (Trip Blank)-14833	03/16/22 16:30	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-004	ERH2832 (Trip Blank)-14525	03/16/22 16:30	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-005	ERH2832 (Trip Blank)-14895	03/16/22 16:30	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-006	ERH2793 (OWDFMW01)	03/15/22 17:45	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction

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B22031470-007	ERH2792 (Trip Blank)-14894	03/15/22 17:45	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-008	ERH2792 (Trip Blank)-14733	03/15/22 17:45	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-009	ERH2792 (Trip Blank)-14894	03/15/22 17:45	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-010	ERH2792 (Trip Blank)-14895	03/15/22 17:45	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-011	ERH2826 (RHMW08)	03/16/22 14:45	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-012	ERH2825 (Trip Blank)-14894	03/16/22 14:45	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-013	ERH2825 (Trip Blank)-14653	03/16/22 14:45	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-014	ERH2825 (Trip Blank)-14694	03/16/22 14:45	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-015	ERH2825 (Trip Blank)-14895	03/16/22 14:45	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-016	ERH2783 (OWDFMW04A)	03/16/22 16:15	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction

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B22031470-017	ERH2784 (OWDFMW04A FD)	03/16/22 16:15	03/19/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22031470-018	ERH2782 (Trip Blank)-14894	03/16/22 16:15	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-019	ERH2782 (Trip Blank)-14833	03/16/22 16:15	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-020	ERH2782 (Trip Blank)-14894	03/16/22 16:15	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-021	ERH2782 (Trip Blank)-14895	03/16/22 16:15	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-022	ERH2836 (RHMW13-05)	03/16/22 13:20	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-023	ERH2835 (Trip Blank)-14894	03/16/22 13:20	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-024	ERH2835 (Trip Blank)-14833	03/16/22 13:20	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-025	ERH2835 (Trip Blank)-14833	03/16/22 13:20	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-026	ERH2835 (Trip Blank)-14895	03/16/22 13:20	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M

ANALYTICAL SUMMARY REPORT

B22031470-027	ERH2823 (OWDFMW07A)	03/16/22 14:21	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-028	ERH2822 (Trip Blank)-14754	03/16/22 14:21	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-029	ERH2822 (Trip Blank)-14833	03/16/22 14:21	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-030	ERH2822 (Trip Blank)-14733	03/16/22 14:21	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-031	ERH2822 (Trip Blank)-14732	03/16/22 14:21	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-032	ERH2841 (RHMW09)	03/16/22 12:25	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-033	ERH2840 (Trip Blank)-14833	03/16/22 12:25	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-034	ERH2840 (Trip Blank)-14894	03/16/22 12:25	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-035	ERH2840 (Trip Blank)-14894	03/16/22 12:20	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-036	ERH2840 (Trip Blank)-14895	03/16/22 12:25	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M

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B22031470-037	ERH2788 (OWDFMW08A)	03/17/22 16:25	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-038	ERH2789 (OWDFMW08A FD)	03/17/22 16:25	03/19/2022	Ground Water	DRO-Liquid-Liquid Extraction SW3520C 8260-Volatile Organic Compounds-Short List SW8260B Gasoline Range Organics SW8015C Diesel Range Organics SW8015C
B22031470-039	ERH2787 (Trip Blank)-14894	03/17/22 14:25	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-040	ERH2787 (Trip Blank)-14894	03/17/22 16:25	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-041	ERH2787 (Trip Blank)-14733	03/17/22 16:25	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-042	ERH2787 (Trip Blank)-14895	03/17/22 16:25	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-043	ERH2830 (OWDFMW05A)	03/17/22 13:20	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-044	ERH2829 (Trip Blank)-14894	03/17/22 13:20	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-045	ERH2829 (Trip Blank)-14833	03/17/22 13:20	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C

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B22031470-046	ERH2829 (Trip Blank)-14694	03/17/22 13:20	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-047	ERH2829 (Trip Blank)-14895	03/17/22 13:20	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-048	ERH2844 (RHMW2254-01 B)	03/17/22 13:00	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-049	ERH2843 (Trip Blank)-14833	03/17/22 13:00	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-050	ERH2843 (Trip Blank)-14754	03/17/22 13:00	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-051	ERH2843 (Trip Blank)-14733	03/17/22 13:00	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-052	ERH2843 (Trip Blank)-14808	03/17/22 13:00	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-053	ERH2850 (Sump Adit 3)	03/17/22 15:05	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-054	ERH2849 (Trip Blank)-14694	03/17/22 15:05	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-055	ERH2849 (Trip Blank)-14894	03/17/22 15:05	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-056	ERH2849 (Trip Blank)-14894	03/17/22 15:05	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction

ANALYTICAL SUMMARY REPORT

B22031470-057	ERH2849 (Trip Blank)-14895	03/17/22 15:05	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-058	ERH2847 (RHMW2254-01 LF)	03/17/22 14:05	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-059	ERH2846 (Trip Blank)-14833	03/17/22 14:05	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-060	ERH2846 (Trip Blank)-14833	03/17/22 14:05	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-061	ERH2846 (Trip Blank)-14894	03/17/22 14:05	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction
B22031470-062	ERH2846 (Trip Blank)-14895	03/17/22 14:05	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M
B22031470-063	ERH2853 (RHMW11-5)	03/17/22 12:40	03/19/2022	Ground Water	Metals Digestion by SW3010A DRO-Liquid-Liquid Extraction SW3520C Carbon, Total Organic SW9060A Metals by ICP-MS, Dissolved SW6020 Metals by ICP-MS, Total SW6020 8260-Volatile Organic Compounds-Short List SW8260B EDB in Water by ECD SW8011 Gasoline Range Organics SW8015C Diesel Range Organics SW8015C Headspace Gas Analysis SW8015M SW8011 Microextraction
B22031470-064	ERH2852 (Trip Blank)-14894	03/17/22 12:40	03/19/2022	Trip Blank	8260-Volatile Organic Compounds-Short List SW8260B
B22031470-065	ERH2852 (Trip Blank)-14833	03/17/22 12:40	03/19/2022	Trip Blank	Gasoline Range Organics SW8015C
B22031470-066	ERH2852 (Trip Blank)-14525	03/17/22 12:40	03/19/2022	Trip Blank	EDB in Water by ECD SW8011 SW8011 Microextraction

ANALYTICAL SUMMARY REPORT

B22031470-067	ERH2852 (Trip Blank)-14895	03/17/22 12:40	03/19/2022	Trip Blank	Headspace Gas Analysis SW8015M

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:

Quality Assurance Manager

Digitally signed by
Leigh Ann. Wise
Date: 2022.03.31 17:50:02 -06:00

CLIENT: AECOM - Honolulu
Project: CV18F0126, 60571032.02.46.01
Work Order: B22031470

Revised Date: 3/31/2022
Report Date: 3/28/2022

CASE NARRATIVE

Revised Date: 03/31/2022

This report was revised to remove the T qualifier from Toluene in sample ERH-2793 (OWDFMW01), B22031470-006 by SW8260B. The report has been revised and replaces the previously issued report dated 3/28/2022 in its entirety.

General Comments:

For any question please contact your Project Manager at (406) 252-6325 or billingspm@energylab.com.

All analyses have been performed in accordance with DOD QSM Version 5.3 unless otherwise noted below. The specific methodologies used in obtaining the enclosed analytical results are indicated on the Analytical Summary Report and the Laboratory Analytical Report. The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted in the Work Order Receipt Checklist.

The tests listed below are accredited and meet the requirements of DoD QSM Version 5.3 as verified by ANSI-ASQ National Accreditation Board (ANAB) certificate number ADE-2588. Exceptions to this require client authorization and records documenting this approval are attached in the Sample Management Records. Accreditation may not be offered or required for all methods and analytes reported in this package. Refer to the certificate and scope of accreditation located at https://www.energylab.com/whyus/certifications-quality-control/ or contact your project manager.

Tests for Total Organic Carbon by SW9060A associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.

Project specific matrix quality control samples may not be reported if site specific samples were not submitted. Matrix quality control samples were performed on project samples where adequate volume was available. All quality control measures met criteria unless otherwise noted in the Analytical QC Exceptions report and in the Analysis Specific Comments below. Where available, sample management records are attached.

The Stage 4 Validation Package includes data reports for all analyses associated with the instrument calibration, quality control (QC) sample analysis, and sample analysis. All analytical data is within method specifications except as noted in the Analytical QC Exceptions report or the Analysis Specific Comments below. The analytical report identifies preparation batch and analytical run IDs associated with each result for a sample. Instances where manual integrations were performed including the technical justification are included in the Integration Summary Reports in the Stage 4 Validation Package. Only the raw data associated with the parameters listed on this report should be validated.

Analysis Specific Comments:

An Analytical QC Exceptions Report has been attached, summarizing all qualified QC results. Where qualified, an analyte exceeded quality control limits, but was not detected in the associated sample(s). No further corrective action was required.

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Chain of Custody & Analytical Request Record

COC # 202203-55NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46 01
Sampler Name	Gavin Mura
Sampler Phone	808 987 3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

Analysis Requested

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1 ERH2833 (RHMW06)	03/16/2022	12 30 pm	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	2203147O-001
2 ERH2832 (Trip Blank)	03/16/2022	12 25 pm	8	WQ	✓	✓	✓	✓							X	002-005
3 TB-14894 (8260)			4													002
4 TB-14833 (GRO)			1													003
5 TB-14525 (801)			1													004
6 TB-14895 (Methane)			2													005
7 THF 3-19-22	03	17	TW													
8																
9																

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03-17-1700				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/19/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.6 °C	Y N	Y N			

In certain circumstances samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-44NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4 Note NOI log is separate from other COC's.

Project Information

Project Name PWSID Permit, etc.	CV18F0126, 60571032.02.46 01
Sampler Name	Chris Womack
Sampler Phone	916 769 9323
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2793 (OWDFMW01)	3.15.22	1345	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	2203147-006
2	ERH2792 (Trip Blank)	3.15.22	1300	8	WQ	✓	✓	✓	✓							X	007-010
3																	
4	TB-14894 (8260)			2													007
5	TB-14733 (GRO)			2													008
6	TB-14894 (8011) 3.17.22			2													009
7	TB-14895 NP (methane)			2													010
8																	
9	3-19-22																

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Zoe Diermier	3.17.22 / 1152	Zoe Diermier			
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Stacy Goldberg	3/19/22 10:15	Stacy Goldberg

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
				0.2 °C					

In certain circumstances, samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v 4

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Chain of Custody & Analytical Request Record

COC # 202203-53NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒LEVEL IV ☐NELAC ☒EDD/EDT (contact laboratory) ☐Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Mura
Sampler Phone	808 987 3201
Sample Origin State	Hawaii
EPA/State Compliance	☐Yes ☒No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2826 (RHMW08)	03/16/2022	10.45 am	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	22030H70-011
2	ERH2825 (Trip Blank)	03/16/2022	10 40 am	8	WQ	✓	✓	✓	✓							X	E-06062-05
3	TB 8260 14894			3													012
4	TB GRO 14653			1													013
5	TB 8011 14694			2													014
6	TB Methane 14895			2													015
7	8260 3/19/22 03/17																
8																	
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03/17 12:00				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				[illegible]	3/19/22 10:15	[illegible]

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.0 °C	Y N	Y N			

In certain circumstances, samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v 4

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Chain of Custody & Analytical Request Record

COC # 202203-54NOI

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DoD Samples **Page** 1 of 1

Account Information *(Billing information)*

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie pascua@aecom com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information *(if different than Account Information)*

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT *(contact laboratory)* ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note NOI log is separate from other COC's

Project Information

Project Name PWSID Permit, etc	CV18F0126, 60571032 02.46 01
Sampler Name	Jorge Villalobos
Sampler Phone	224 645 7832
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification *(Name, Location, Interval, etc.)*	Collection Date	Collection Time	Number of Containers	Matrix *(See Codes Above)*	8260 VOCs (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID *Laboratory Use Only*
1	ERH2783 (OWDFMW04A)	03/16/2022	12 15 pm	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	B2203470-016
2	ERH2782 (Trip Blank)	03/16/2022	11 30 am	8	WQ	✓	✓	✓	✓							X	018-021
3	ERH2784 (OWDFMW04A FD)	03/16/2022	12 15 pm	8	GW	✓	✓			✓						X	017
4	TB 8260 14894			2													018
5	TB GRO 14033			2													019
6	TB BOII 14894			2													020
7	TB Methane 14895		03/17 TW														021
8																	
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03/17 12:00				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/18/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number *(cash/check only)*
				0.6 °C	Y	Y			

In certain circumstances, samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

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Chain of Custody & Analytical Request Record

COC # 202203-56NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note. NOI log is separate from other COC's.

Project Information

Project Name PWSID Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Michael McCullough
Sampler Phone	302 220 8000
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2836 (RHMW13-05)	03/16/2022	9:20 am	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	R2203147D-022
2	ERH2835 (Trip Blank)	03/16/2022	8 45 am	8	WQ	✓	✓	✓	✓							X	023-026
3	TB8260 14894			3													023
4	TB8RO 14833			1													024
5	TB8011 14833			2													025
6	TBmethane 14895			2													026
7																	
8																	
9																	

3/17/22 03/17

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03/17 12:00				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Stacie Cottle	3/18/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	Chilled Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
				0.6 °C	Y N	Y N			

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v 4

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Chain of Custody & Analytical Request Record

COC # 202203-52NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note. NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Jorge Villalobos
Sampler Phone	224 645 7832
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2823 (OWDFMW07A)	03/16/2022	10:21 am	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	B203470-027
2	ERH2822 (Trip Blank)	03/16/2022	9:30 am	8	WQ	✓	✓	✓	✓							X	028-031
3	TB-14754 (8260)			2													028
4	TB-14833 (GRO)			2													029
5	TB-14733 (8011)			2													030
6	TB-14732 (methane)			2													031
7	AKZ-A22																
8		03/17		1	TW												
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Taylor White	03/17 12:00				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
				Stacia Gottlob	3/19/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)
				0.2 °C	Y N	Y N			

In certain circumstances samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v 4

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Chain of Custody & Analytical Request Record

COC # 202203-57NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City State Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City State Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note NOI log is separate from other COC's.

Project Information

Project Name PWSID Permit etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Gavin Mura
Sampler Phone	808 987 3201
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as indicated.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2841 (RHMW09)	03/16/2022	8:25 am	17	GW	✓	✓	✓	✓	✓	✓	✓	✓			X	202203470-032
2	ERH2840 (Trip Blank)	03/16/2022	8:20 am	8	WQ	✓	✓	✓	✓							X	033-036
3	TB 8260 14833			2													033
4	TB GRO 14894			2													034
5	TB 8011 14894			2													035
6	TB Methane 14885 3-17-22			2													036
7																	
8																	
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Zoe Diermie	3-17-22/1201				
	Relinquished by (print)	Date/Time	Signature	Received by Laboratory (print)	Date/Time	Signature
					3/19/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.4	Y	Y			

In certain circumstances, samples submitted to Energy Laboratories Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ENERGY LABORATORIES
Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

COC # 202203-40NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	alethea ramos / margie pascua@aecom com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction
3 Preliminary data (or Level II) in 7 business days
4 Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Ryan Shimoto
Sampler Phone	808, 393, 6607
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following analyses may be subcontracted by other certified laboratories as shown. Signing this document authorization to subcontract the analysis as outlined.

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes: A - Air; W - Water; S - Soils/Solids; V - Vegetation; B - Biosassy; O - Oil; DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9056 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2788 (OWDFMW08A)	03/17/22	1215	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	2203140-037
2	ERH2787 (Trip Blank)	03/17/22	1155	8	WQ	✔	✔	✔	✔							X	039-042
3	ERH2789 (OWDFMW08A FD)	03/17/22	1215	8	GW	✔	✔			✔						X	038
4	TB-14894 (8260)			2													039
5	TB-14894 (EPA)			2													040
6	TB-14733 (8011)			2													041
7																	
8	TB-14895 (Methane)			2													042
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Ryan Shimoto	3/17/22 1400		Clara Lin	03/17/2022 1440	
	Clara Lin	03/17/2022 1440		Sara Gottlob	3/18/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.4 °C					

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-54NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State Zip	Honolulu, Hawaii 96813
Email	alethea ramos / margie pascua@aecom com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Ryan Shmoth
Sampler Phone	9083936607
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analysis as indicated.

Analysis: TOC — Subcontract Lab: Energy Laboratories Inc., Casper

Matrix Codes: A - Air; W - Water; S - Soils/Solids; V - Vegetation; B - Bioassay; O - Oil; DW - Drinking Water

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2830 (OWDFMW05A)	3/17/22	920	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	2203470-043
2	ERH2829 (Trip Blank)	↓	830	8	WQ	✔	✔	✔	✔							X	044-047
3	~~TB 8260~~ 14894			3													044
4	TB GRO 14833			1													045
5	TB 8011 14694			2													046
6	TB Methane 14895			2	HCl												047
7	~~8260~~ 8011/504																
8																	
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Ryan Shmoth	3/17/22 1400		Alex Edmonds	3/17/22 1400	
	Alex Edmonds	3/17/22 1329		Received by (Laboratory) (print)	Date/Time	Signature
					3/18/22 10:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 1.0 °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

Chain of Custody & Analytical Request Record

COC # 202203-58NOI

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DoD Samples Page 1 of 1

Account Information *(Billing information)*

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie.pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information *(if different than Account Information)*

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT *(contact laboratory)* ☐ Other_____

Comments

1. Project performed under DoD QSM.
2 TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	MM, NL, RT, TN
Sampler Phone	
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization for subcontract this analysis as indicated:

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Solid/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

Analysis Requested

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID# (Laboratory Use Only)
1	ERH2844 (RHMW2254-01 B)	03/17/22	0900	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B203470-048
2	ERH2843 (Trip Blank)	03/17/22	0855	8	WQ	✔	✔	✔	✔							X	049-052
3	TB BRD 14833			2													049
4	TB GRD 14754			2													050
5	TB BOIL 14733			2													051
6	TB Methane 14808			2													052
7	8260 3/19/22	3.17			TW												
8																	
9																	

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print)	RACHEL TVCET	Date/Time 03/17/22 1250	Signature	Received by (print)	Alex Edmonds	Date/Time 3/17/22 1258	Signature
	Relinquished by (print)	Taylor White	Date/Time 03/17/22 1345	Signature	Received by Laboratory (print)		Date/Time 3/17/22 10:15	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.1 °C	Temp Blank 0 N	On Ice Y N	Payment Type CC Cash Check_____	Amount $	Receipt Number *(cash/check only)*

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-60NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St , Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie pascua@aecom com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	MM, NL, RT, AE
Sampler Phone	808-286-3810
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Subcontract data is reported on separate report and analyses as indicated:

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

Analysis Requested

#	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 8020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	Lab ID
1	ERH2850 (SUMP ADIT 3)	3/17/22	1105	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B22034470-053
2	ERH2849 (Trip Blank)	3/17/22	1100	8	WQ	✔	✔	✔	✔							X	054-057
3	TB 8260 14894			2													054
4	TB GRO 14894			2													055
5	TB BDU 14894			2													056
6	TB Methane 14895			2													057
7	8260 3/19/22																
8																	
9																	

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were NOT used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	RAE KLINCKET	03/17/2022 1258		Alex Edmonds	3/17/22 1258	
	Alex Edmonds	3/17/22 1325		Staci Gottlieb	3/19/22 6:15	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				0.4	Y	Y			

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v 4

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Chain of Custody & Analytical Request Record

COC # 202203-59NOI

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DoD Samples Page 1 of 1

Account Information (Billing information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (If different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats:	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other_____

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	MM, NL, RT, TN
Sampler Phone	
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC is authorization to subcontract the analyses as identified:

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Bioassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 8060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	Laboratory Use Only
1	ERH2847 (RHMW2254-01 LF)	03/17/22	1005	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	B203470-058
2	ERH2846 (Trip Blank)	03/17/22	1000	8	WQ	✔	✔	✔	✔							X	059-060
3																	
4	TB-14833 (8260)			2													059
5	TB-14833 (GRO) 3-17-22			2													060
6	TB-14894 3-17-22 (8011)			2													061
7																	
8	TB-14895 (methane)			2													062
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print) Rachel Tucci	Date/Time 03/17/22 1258	Signature	Received by (print) Alex Edmonds	Date/Time 3/17/22 1258	Signature	
	Relinquished by (print) Zoe Diermier	Date/Time 3.17.22/1319	Signature	Received by Laboratory (print) Staci Gutierrez	Date/Time 3/18/22 10:15	Signature	

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp 0.3 °C	Temp Blank (Y) N	On Ice (Y) N	Payment Type CC Cash Check_____	Amount $	Receipt Number (cash/check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

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Chain of Custody & Analytical Request Record

COC # 202203-61NOI

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DoD Samples Page 1 of 1

Account Information (Billing Information)

Company/Name	AECOM
Contact	Alethea Ramos / Margie Pascua
Phone	808-529-7283 / 808-356-5373
Mailing Address	1001 Bishop St., Suite 1600
City, State, Zip	Honolulu, Hawaii 96813
Email	alethea.ramos / margie pascua@aecom.com
Receive Invoice	☐Hard Copy ☒Email
Receive Report	☐Hard Copy ☒Email
Purchase Order	N/A
Quote	N/A
Bottle Order	N/A

Report Information (if different than Account Information)

Company/Name	AECOM
Contact	see Account information
Phone	
Mailing Address	
City, State, Zip	
Email	USAPimaging@aecom.com
Receive Report	☐Hard Copy ☒Email
Special Report/Formats:	☒ LEVEL IV ☐NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

1. Project performed under DoD QSM.
2. TPH-d/o needs 3520 extraction.
3. Preliminary data (or Level II) in 7 business days.
4. Note: NOI log is separate from other COC's.

Project Information

Project Name, PWSID, Permit, etc.	CV18F0126, 60571032.02.46.01
Sampler Name	Sarah Keller
Sampler Phone	478.973.0378
Sample Origin State	Hawaii
EPA/State Compliance	☐ Yes ☒ No

The following tests will be subcontracted to other certified laboratories as shown. Signing this COC indicates agreement to subcontract the analyses as indicated:

Analysis	Subcontract Lab
TOC	Energy Laboratories Inc., Casper

Matrix Codes

A - Air
W - Water
S - Soils/Solids
V - Vegetation
B - Biosassay
O - Oil
DW - Drinking Water

All turnaround times are standard unless marked as RUSH

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling – See Instructions Page

	Sample Identification (Name, Location, Interval, etc.)	Collection Date	Collection Time	Number of Containers	Matrix (See Codes Above)	8260 VOC's (Full Suite) + DCA* [40ml VOA w/HCL]	8015 TPH-g [40ml VOA w/ HCL]	RSK175 Methane [40ml VOA w/H2SO4]	8011 EDB [40ml VOA w/HCL]	EPA 3630/8015 TPH-d/o +SGC [1-L AG w/H2SO4]	EPA 6020 Diss. Lead [250ml HDPE w/HNO3] (field Filtered)	EPA 9060 TOC [250ml AG w/ H3PO4]	EPA 6020 Total Lead [250ml HDPE w/HNO3]		See Attached	RUSH TAT	ELI LAB ID (Laboratory Use Only)
1	ERH2853 (RHMW11-5)	03/17/22	0840	17	GW	✔	✔	✔	✔	✔	✔	✔	✔			X	202203470-063
2	ERH2852 (Trip Blank)	03/17/22	0825	8	WQ	✔	✔	✔	✔							X	064-067
3	TBBOGO 14894			4													064
4	TBGRO 14833			1													065
5	TB 8011 14305			1													066
6	TB Methane 14895			2													067
7																	
8																	
9																	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were **NOT** used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature
	Clara Un	03/17/22 1313		Alex Edwards	3/17/22 1313	
	Relinquished by (print) Taylor White	Date/Time 03/17/22 1313	Signature	Received by Laboratory (print)	Date/Time 3/18/22 10:15	Signature

LABORATORY USE ONLY

Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp	Temp Blank Y N	On Ice Y N	Payment Type CC Cash Check	Amount $	Receipt Number (cash/check only)
				6.4 °C	N	Y			

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-01/21 v.4

Work Order Receipt Checklist

AECOM - Honolulu

B22031470

Login completed by:	Leslie S. Cadreau	Date Received:	3/19/2022
Reviewed by:	BL2000\gmccartney	Received by:	srg
Reviewed Date:	3/26/2022	Carrier name:	FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☑	No ☐	Not Present ☐
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☑	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☑	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	°C On Ice		
Water - VOA vials have zero headspace?	Yes ☐	No ☑	Not Applicable ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

The collection time indicated on the Chain of Custody for all samples is in Hawaii-Aleutian Standard Time. The collection time has been converted (+4 Hours) to Mountain Standard Time.

The Temperature Blank temperature for shipping container 1 was 0.6°C, shipping container 2 was 0.2°C, shipping container 3 was 0.6°C, shipping container 4 was 0.0°C, shipping container 5 was 0.1°C, shipping container 6 was 0.4°C, shipping container 7 was 0.2°C, shipping container 8 was 0.4°C, shipping container 9 was 0.6°C, shipping container 10 was 1.0°C, shipping container 11 was 0.4°C, shipping container 12 was 0.3°C and shipping container 13 was 0.4°C.

The 40mL Sulfuric acid preserved VOA vials for the Methane analysis were not received with the bottle order labels on the containers for samples ERH2833 (RHMW06), ERH2793 (OWDFMW01), ERH2826 (RHMW08), ERH2783 (OWDFMW04A), ERH2836 (RHMW13-05), ERH2841 (RHMW09), ERH2788 (OWDFMW08A), ERH2830 (OWDFMW05A), ERH2850 (Sump Adit 3), ERH2847 (RHMW2254-01 LF) and ERH2853 (RHMW11-5). Preservative traceability is not available for these containers. Notified AECOM by email 03/20/2022 and proceeded with the Methane analysis unless further instruction is provided.

One of the three VOA vials for samples ERH2784 (OWDFMW04A FD) and ERH2788 (OWDFMW08A) for Volatile Organics analysis was received containing headspace gas bubbles greater than 1/4 inch in diameter. There is sufficient volume to continue with analysis using the remaining vials.

Two of the six VOA vials for sample ERH2783 (OWDFMW04A) for Gasoline Range Organics and EDB in Water by ECD analysis was received containing headspace gas bubbles greater than 1/4 inch in diameter. There is sufficient volume to continue with analysis using the remaining vials.

Qualifiers and Abbreviations

Qualifier	Qualifier Description
##	Limit of Quantitation (LOQ) for this analyte exceeds the Maximum Contaminant Level (MCL)
*	Result exceeds the Maximum Contaminant Level (MCL)
A	The analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated
B	Analyte detected in the method blank
C	Continuing calibration verification was outside of the quality control advisory limits
D	Limit of Quantitation (LOQ) increased due to sample matrix
E	Estimated value - result exceeds the instrument upper quantitation limit
H	Analysis performed past the method holding time
J	The reported result is an estimated value
L	Lowest Limit of Quantitation (LOQ) available for the analytical method used
N	Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test
O	Diluted out
P	Poor method performance - method validations have shown no recoveries at low concentrations or method performance was erratic
Q	Values reported below the Limit of Quantitation (LOQ) are statistically invalid
R	Relative Percent Difference (RPD) exceeds advisory limit
S	Spike recovery outside of advisory limits
T	Analyte detected in the associated trip blank
U	Not detected at the Limit of Detection (LOD)
V	The RPD value for this duplicate represents the RER value and the RPDLimit of 2 is the RER upper limit.

Qualifiers and Abbreviations

Abbreviation

Reporting	Explanation of Abbreviation
DF	Dilution Factor
DL	Detection Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
MCL	Maximum Contaminant Level
MDC	Minimum Detectable Concentration
ND	Not detected at the Limit of Quantitaton (LOQ)
RBSL	Risk-Based Screening Levels
REC	Recovery
RER	Relative Error Ratio
RPD	Relative Percent Difference
SPK	Spike

Sample Types	Explanation of Abbreviation
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification Standard
DUP	Sample Duplicate
ICSA	Interference Check Sample A
ICSAB	Interference Check Sample AB
ICV	Initial Calibration Verification Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LFB	Laboratory Fortified Blank
LRB	Laboratory Reagent Blank
MBLK	Method Blank
MS	Sample Matrix Spike
MSD	Sample Matrix Spike Duplicate
PDS	Post Digestion/Distillation Spike
QCS	Quality Control Sample
SD	Serial Dilution
SRM	Standard Reference Material

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2833 (RHMW06)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-001
Collection Date: 03/16/2022 16:30
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.30	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/22/2022 21:05/eli-ca	SUB-C280786 : 11	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/22/2022 21:40/car	ICPMS207-B_220322A : 73	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/22/2022 22:11/car	ICPMS207-B_220322A : 78	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-001
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2833 (RHMW06)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/21/2022 14:11/msc	VOA5975C.I_220321A : 8	R376614
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0047	0.0024		SW8011	03/21/2022 19:42/clt	GECD.I_220321A : 15	164679
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/21/2022 19:42/clt	GECD.I_220321A : 15	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 00:02/jp	VARIAN1_220321A : 20	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 00:02/jp	VARIAN1_220321A : 20	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/22/2022 00:02/jp	VARIAN1_220321A : 20	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/23/2022 02:05/amn	GCFID-HP5-B_220322A : 17	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/23/2022 02:05/amn	GCFID-HP5-B_220322A : 17	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/23/2022 02:05/amn	GCFID-HP5-B_220322A : 17	164697
Surr: o-Terphenyl	96.0	%REC	1		56-125				SW8015C	03/23/2022 02:05/amn	GCFID-HP5-B_220322A : 17	164697
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/23/2022 02:05/amn	GCFID-HP5-B_220322A : 17	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-001
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2833 (RHMW06)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:16/jdw	FID-HEADSPACE_220321B : 5	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2832 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-002
Collection Date: 03/16/2022 16:30
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Toluene	0.068	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-002
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2832 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/21/2022 18:17/msc	VOA5975C.I_220321A : 17	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-003
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2832 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/21/2022 17:45/jp	VARIAN1_220321A : 11	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/21/2022 17:45/jp	VARIAN1_220321A : 11	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/21/2022 17:45/jp	VARIAN1_220321A : 11	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-004
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2832 (Trip Blank)-14525
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/21/2022 20:02/clt	GECD.I_220321A : 16	164679
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/21/2022 20:02/clt	GECD.I_220321A : 16	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-005
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:30
Client Sample ID: ERH2832 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:21/jdw	FID-HEADSPACE_220321B : 6	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2793 (OWDFMW01)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-006
Collection Date: 03/15/2022 17:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.33	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/22/2022 21:48/eli-ca	SUB-C280786 : 12	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/22/2022 22:18/car	ICPMS207-B_220322A : 79	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/22/2022 22:24/car	ICPMS207-B_220322A : 80	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Chloroform	0.18	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-006
Client: AECOM - Honolulu
Collection Date: 03/15/2022 17:45
Client Sample ID: ERH2793 (OWDFMW01)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/21/2022 14:38/msc	VOA5975C.I_220321A : 9	R376614
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/21/2022 20:22/clt	GECD.I_220321A : 17	164679
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/21/2022 20:22/clt	GECD.I_220321A : 17	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 01:11/jp	VARIAN1_220321A : 21	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 01:11/jp	VARIAN1_220321A : 21	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/22/2022 01:11/jp	VARIAN1_220321A : 21	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/22/2022 15:24/amn	GCFID-HP5-B_220322A : 6	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/22/2022 15:24/amn	GCFID-HP5-B_220322A : 6	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/22/2022 15:24/amn	GCFID-HP5-B_220322A : 6	164697
Surr: o-Terphenyl	93.0	%REC	1		56-125				SW8015C	03/22/2022 15:24/amn	GCFID-HP5-B_220322A : 6	164697
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/22/2022 15:24/amn	GCFID-HP5-B_220322A : 6	164697

- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-006
Client: AECOM - Honolulu
Collection Date: 03/15/2022 17:45
Client Sample ID: ERH2793 (OWDFMW01)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:26/jdw	FID-HEADSPACE_220321B : 7	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2792 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-007
Collection Date: 03/15/2022 17:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-007
Client: AECOM - Honolulu
Collection Date: 03/15/2022 17:45
Client Sample ID: ERH2792 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Surr: 1,2-Dichloroethane-d4	107.0	%REC	1		81-118				SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/21/2022 18:44/msc	VOA5975C.I_220321A : 18	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-008
Client: AECOM - Honolulu
Collection Date: 03/15/2022 17:45
Client Sample ID: ERH2792 (Trip Blank)-14733
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/21/2022 18:19/jp	VARIAN1_220321A : 12	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/21/2022 18:19/jp	VARIAN1_220321A : 12	R376668
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/21/2022 18:19/jp	VARIAN1_220321A : 12	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-009
Client: AECOM - Honolulu
Collection Date: 03/15/2022 17:45
Client Sample ID: ERH2792 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/21/2022 20:41/clt	GECD.I_220321A : 18	164679
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/21/2022 20:41/clt	GECD.I_220321A : 18	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2792 (Trip Blank)-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-010
Collection Date: 03/15/2022 17:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:30/jdw	FID-HEADSPACE_220321B : 8	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2826 (RHMW08)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-011
Collection Date: 03/16/2022 14:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.6 to 0.6	0.63	mg/L	1		0.50	0.50	0.17		SW9060A	03/22/2022 22:33/eli-ca	SUB-C280786 : 13	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/22/2022 22:43/car	ICPMS207-B_220322A : 83	R376663
METALS, TOTAL												
Lead	0.00009	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/22/2022 22:49/car	ICPMS207-B_220322A : 84	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-011
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:45
Client Sample ID: ERH2826 (RHMW08)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/21/2022 15:05/msc	VOA5975C.I_220321A : 10	R376614
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/21/2022 21:01/clt	GECD.I_220321A : 19	164679
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/21/2022 21:01/clt	GECD.I_220321A : 19	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 02:20/jp	VARIAN1_220321A : 22	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 02:20/jp	VARIAN1_220321A : 22	R376668
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/22/2022 02:20/jp	VARIAN1_220321A : 22	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/23/2022 15:39/amn	GCFID-HP5-B_220322A : 28	164697
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/24/2022 13:55/amn	GCFID-HP5-B_220324A : 6	164697
Oil Range Hydrocarbons (C24 to C40)	0.12	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/23/2022 15:39/amn	GCFID-HP5-B_220322A : 28	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/24/2022 13:55/amn	GCFID-HP5-B_220324A : 6	164697
Total Extractable Hydrocarbons	0.17	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/23/2022 15:39/amn	GCFID-HP5-B_220322A : 28	164697
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/24/2022 13:55/amn	GCFID-HP5-B_220324A : 6	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-011
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:45
Client Sample ID: ERH2826 (RHMW08)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	101.0	%REC	1		56-125				SW8015C	03/23/2022 15:39/amn	GCFID-HP5-B_220322A : 28	164697
Surr: o-Terphenyl (SGT)	84.0	%REC	1		56-125				SW8015C	03/24/2022 13:55/amn	GCFID-HP5-B_220324A : 6	164697
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	03/23/2022 15:39/amn	GCFID-HP5-B_220322A : 28	164697
Surr: n-Triacontane (SGT)	74.0	%REC	1		50-150				SW8015C	03/24/2022 13:55/amn	GCFID-HP5-B_220324A : 6	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:35/jdw	FID-HEADSPACE_220321B : 9	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2825 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-012
Collection Date: 03/16/2022 14:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Toluene	0.20	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-012
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:45
Client Sample ID: ERH2825 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Surr: 1,2-Dichloroethane-d4	106.0	%REC	1		81-118				SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/21/2022 19:11/msc	VOA5975C.I_220321A : 19	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-013
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:45
Client Sample ID: ERH2825 (Trip Blank)-14653
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/21/2022 18:54/jp	VARIAN1_220321A : 13	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/21/2022 18:54/jp	VARIAN1_220321A : 13	R376668
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/21/2022 18:54/jp	VARIAN1_220321A : 13	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-014
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:45
Client Sample ID: ERH2825 (Trip Blank)-14694
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0050	0.0026		SW8011	03/21/2022 21:21/clt	GECD.I_220321A : 20	164679
Surr: 1,1,1,2-Tetrachloroethane	92.0	%REC	1		70-130				SW8011	03/21/2022 21:21/clt	GECD.I_220321A : 20	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2825 (Trip Blank)-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-015
Collection Date: 03/16/2022 14:45
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:39/jdw	FID-HEADSPACE_220321B : 10	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2783 (OWDFMW04A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-016
Collection Date: 03/16/2022 16:15
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.9 to 0.9	0.91	mg/L	1		0.50	0.50	0.17		SW9060A	03/22/2022 23:15/eli-ca	SUB-C280786 : 14	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/22/2022 22:55/car	ICPMS207-B_220322A : 85	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/22/2022 23:01/car	ICPMS207-B_220322A : 86	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Chloroform	2.7	ug/L	1		1.0	0.20	0.079		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-016
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2783 (OWDFMW04A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/21/2022 15:33/msc	VOA5975C.I_220321A : 11	R376614
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/21/2022 21:41/clt	GECD.I_220321A : 21	164679
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/21/2022 21:41/clt	GECD.I_220321A : 21	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/22/2022 03:28/jp	VARIAN1_220321A : 23	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/22/2022 03:28/jp	VARIAN1_220321A : 23	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/22/2022 03:28/jp	VARIAN1_220321A : 23	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/22/2022 16:06/amn	GCFID-HP5-B_220322A : 7	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/22/2022 16:06/amn	GCFID-HP5-B_220322A : 7	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/22/2022 16:06/amn	GCFID-HP5-B_220322A : 7	164697
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	03/22/2022 16:06/amn	GCFID-HP5-B_220322A : 7	164697
Surr: n-Triacontane	86.0	%REC	1		50-150				SW8015C	03/22/2022 16:06/amn	GCFID-HP5-B_220322A : 7	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-016
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2783 (OWDFMW04A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:44/jdw	FID-HEADSPACE_220321B : 11	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2784 (OWDFMW04A FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-017
Collection Date: 03/16/2022 16:15
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Chloroform	2.7	ug/L	1		1.0	0.20	0.079		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-017
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2784 (OWDFMW04A FD)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/21/2022 16:00/msc	VOA5975C.I_220321A : 12	R376614
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	UT	20	8.7	2.0		SW8015C	03/22/2022 04:37/jp	VARIAN1_220321A : 24	R376668
Total Purgeable Hydrocarbons	3.7	ug/L	1	JT	20	10	3.1		SW8015C	03/22/2022 04:37/jp	VARIAN1_220321A : 24	R376668
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/22/2022 04:37/jp	VARIAN1_220321A : 24	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/22/2022 16:49/amn	GCFID-HP5-B_220322A : 8	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/22/2022 16:49/amn	GCFID-HP5-B_220322A : 8	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/22/2022 16:49/amn	GCFID-HP5-B_220322A : 8	164697
Surr: o-Terphenyl	91.0	%REC	1		56-125				SW8015C	03/22/2022 16:49/amn	GCFID-HP5-B_220322A : 8	164697
Surr: n-Triacontane	86.0	%REC	1		50-150				SW8015C	03/22/2022 16:49/amn	GCFID-HP5-B_220322A : 8	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2782 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-018
Collection Date: 03/16/2022 16:15
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Toluene	0.16	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-018
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2782 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614
Surr: p-Bromofluorobenzene	107.0	%REC	1		85-114				SW8260B	03/21/2022 19:39/msc	VOA5975C.I_220321A : 20	R376614

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-019
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2782 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.1	ug/L	1	J	20	8.7	2.0		SW8015C	03/22/2022 12:02/jp	VARIAN1_220321A : 32	R376668
Total Purgeable Hydrocarbons	3.1	ug/L	1	J	20	10	3.1		SW8015C	03/22/2022 12:02/jp	VARIAN1_220321A : 32	R376668
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/22/2022 12:02/jp	VARIAN1_220321A : 32	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-020
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2782 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/21/2022 22:00/clt	GECD.I_220321A : 22	164679
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/21/2022 22:00/clt	GECD.I_220321A : 22	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-021
Client: AECOM - Honolulu
Collection Date: 03/16/2022 16:15
Client Sample ID: ERH2782 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:48/jdw	FID-HEADSPACE_220321B : 12	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2836 (RHMW13-05)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-022
Collection Date: 03/16/2022 13:20
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.37	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/22/2022 23:57/eli-ca	SUB-C280786 : 15	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 01:20/car	ICPMS207-B_220322A : 108	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/23/2022 01:27/car	ICPMS207-B_220322A : 109	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-022
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2836 (RHMW13-05)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/23/2022 15:43/msc	VOA5975C.I_220323A : 12	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/21/2022 22:20/clt	GECD.I_220321A : 23	164679
Surr: 1,1,1,2-Tetrachloroethane	86.0	%REC	1		70-130				SW8011	03/21/2022 22:20/clt	GECD.I_220321A : 23	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 05:46/jp	VARIAN1_220321A : 25	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 05:46/jp	VARIAN1_220321A : 25	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/22/2022 05:46/jp	VARIAN1_220321A : 25	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/23/2022 01:22/amn	GCFID-HP5-B_220322A : 16	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/23/2022 01:22/amn	GCFID-HP5-B_220322A : 16	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/23/2022 01:22/amn	GCFID-HP5-B_220322A : 16	164697
Surr: o-Terphenyl	92.0	%REC	1		56-125				SW8015C	03/23/2022 01:22/amn	GCFID-HP5-B_220322A : 16	164697
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/23/2022 01:22/amn	GCFID-HP5-B_220322A : 16	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-022
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2836 (RHMW13-05)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:53/jdw	FID-HEADSPACE_220321B : 13	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2835 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-023
Collection Date: 03/16/2022 13:20
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Toluene	0.21	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-023
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2835 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Surr: Toluene-d8	91.0	%REC	1		89-112				SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/23/2022 16:10/msc	VOA5975C.I_220323A : 13	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-024
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2835 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 12:37/jp	VARIAN1_220321A : 33	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 12:37/jp	VARIAN1_220321A : 33	R376668
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/22/2022 12:37/jp	VARIAN1_220321A : 33	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-025
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2835 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/21/2022 22:40/clt	GECD.I_220321A : 24	164679
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/21/2022 22:40/clt	GECD.I_220321A : 24	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-026
Client: AECOM - Honolulu
Collection Date: 03/16/2022 13:20
Client Sample ID: ERH2835 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 14:57/jdw	FID-HEADSPACE_220321B : 14	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2823 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-027
Collection Date: 03/16/2022 14:21
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.29	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 00:36/eli-ca	SUB-C280786 : 16	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 01:33/car	ICPMS207-B_220322A : 110	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/23/2022 01:39/car	ICPMS207-B_220322A : 111	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2823 (OWDFMW07A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-027
Collection Date: 03/16/2022 14:21
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Surr: 1,2-Dichloroethane-d4	113.0	%REC	1		81-118				SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
Surr: p-Bromofluorobenzene	112.0	%REC	1		85-114				SW8260B	03/23/2022 12:59/msc	VOA5975C.I_220323A : 6	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/21/2022 23:59/clt	GECD.I_220321A : 26	164679
Surr: 1,1,1,2-Tetrachloroethane	85.0	%REC	1		70-130				SW8011	03/21/2022 23:59/clt	GECD.I_220321A : 26	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 06:54/jp	VARIAN1_220321A : 26	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 06:54/jp	VARIAN1_220321A : 26	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/22/2022 06:54/jp	VARIAN1_220321A : 26	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.046	mg/L	1	J	0.30	0.014	0.037		SW8015C	03/22/2022 18:14/amn	GCFID-HP5-B_220322A : 9	164697
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/24/2022 22:29/amn	GCFID-HP5-B_220324A : 14	164697
Oil Range Hydrocarbons (C24 to C40)	0.14	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/22/2022 18:14/amn	GCFID-HP5-B_220322A : 9	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/24/2022 22:29/amn	GCFID-HP5-B_220324A : 14	164697
Total Extractable Hydrocarbons	0.21	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/22/2022 18:14/amn	GCFID-HP5-B_220322A : 9	164697
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/24/2022 22:29/amn	GCFID-HP5-B_220324A : 14	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-027
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:21
Client Sample ID: ERH2823 (OWDFMW07A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	94.0	%REC	1		56-125				SW8015C	03/22/2022 18:14/amn	GCFID-HP5-B_220322A : 9	164697
Surr: o-Terphenyl (SGT)	96.0	%REC	1		56-125				SW8015C	03/24/2022 22:29/amn	GCFID-HP5-B_220324A : 14	164697
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/22/2022 18:14/amn	GCFID-HP5-B_220322A : 9	164697
Surr: n-Triacontane (SGT)	85.0	%REC	1		50-150				SW8015C	03/24/2022 22:29/amn	GCFID-HP5-B_220324A : 14	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:01/jdw	FID-HEADSPACE_220321B : 15	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2822 (Trip Blank)-14754
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-028
Collection Date: 03/16/2022 14:21
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Toluene	0.10	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-028
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:21
Client Sample ID: ERH2822 (Trip Blank)-14754
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/23/2022 16:38/msc	VOA5975C.I_220323A : 14	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-029
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:21
Client Sample ID: ERH2822 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 13:11/jp	VARIAN1_220321A : 34	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 13:11/jp	VARIAN1_220321A : 34	R376668
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/22/2022 13:11/jp	VARIAN1_220321A : 34	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-030
Client: AECOM - Honolulu
Collection Date: 03/16/2022 14:21
Client Sample ID: ERH2822 (Trip Blank)-14733
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 00:18/clt	GECD.I_220321A : 27	164679
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/22/2022 00:18/clt	GECD.I_220321A : 27	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2822 (Trip Blank)-14732
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-031
Collection Date: 03/16/2022 14:21
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:06/jdw	FID-HEADSPACE_220321B : 16	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2841 (RHMW09)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-032
Collection Date: 03/16/2022 12:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.26	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 01:15/eli-ca	SUB-C280786 : 17	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 01:45/car	ICPMS207-B_220322A : 112	R376663
METALS, TOTAL												
Lead	0.00007	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/23/2022 01:52/car	ICPMS207-B_220322A : 113	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-032
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:25
Client Sample ID: ERH2841 (RHMW09)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/23/2022 13:26/msc	VOA5975C.I_220323A : 7	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 00:38/clt	GECD.I_220321A : 28	164679
Surr: 1,1,1,2-Tetrachloroethane	93.0	%REC	1		70-130				SW8011	03/22/2022 00:38/clt	GECD.I_220321A : 28	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 10:54/jp	VARIAN1_220321A : 31	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 10:54/jp	VARIAN1_220321A : 31	R376668
Surr: Trifluorotoluene	72.0	%REC	1		70-130				SW8015C	03/22/2022 10:54/jp	VARIAN1_220321A : 31	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.070	mg/L	1	J	0.30	0.014	0.037		SW8015C	03/23/2022 03:30/amn	GCFID-HP5-B_220322A : 18	164697
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/25/2022 01:22/amn	GCFID-HP5-B_220324A : 17	164697
Oil Range Hydrocarbons (C24 to C40)	0.17	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/23/2022 03:30/amn	GCFID-HP5-B_220322A : 18	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/25/2022 01:22/amn	GCFID-HP5-B_220324A : 17	164697
Total Extractable Hydrocarbons	0.27	mg/L	1	J	0.30	0.14	0.071		SW8015C	03/23/2022 03:30/amn	GCFID-HP5-B_220322A : 18	164697
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/25/2022 01:22/amn	GCFID-HP5-B_220324A : 17	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-032
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:25
Client Sample ID: ERH2841 (RHMW09)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	03/23/2022 03:30/amn	GCFID-HP5-B_220322A : 18	164697
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	03/25/2022 01:22/amn	GCFID-HP5-B_220324A : 17	164697
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/23/2022 03:30/amn	GCFID-HP5-B_220322A : 18	164697
Surr: n-Triacontane (SGT)	82.0	%REC	1		50-150				SW8015C	03/25/2022 01:22/amn	GCFID-HP5-B_220324A : 17	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:12/jdw	FID-HEADSPACE_220321B : 17	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2840 (Trip Blank)-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-033
Collection Date: 03/16/2022 12:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-033
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:25
Client Sample ID: ERH2840 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Surr: 1,2-Dichloroethane-d4	109.0	%REC	1		81-118				SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Surr: Toluene-d8	91.0	%REC	1		89-112				SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/23/2022 17:05/msc	VOA5975C.I_220323A : 15	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-034
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:25
Client Sample ID: ERH2840 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 13:45/jp	VARIAN1_220321A : 35	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 13:45/jp	VARIAN1_220321A : 35	R376668
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/22/2022 13:45/jp	VARIAN1_220321A : 35	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-035
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:20
Client Sample ID: ERH2840 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 00:58/clt	GECD.I_220321A : 29	164679
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/22/2022 00:58/clt	GECD.I_220321A : 29	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-036
Client: AECOM - Honolulu
Collection Date: 03/16/2022 12:25
Client Sample ID: ERH2840 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:17/jdw	FID-HEADSPACE_220321B : 18	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2788 (OWDFMW08A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-037
Collection Date: 03/17/2022 16:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.3 to 0.3	0.34	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 03:14/eli-ca	SUB-C280786 : 18	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 01:58/car	ICPMS207-B_220322A : 114	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/23/2022 02:04/car	ICPMS207-B_220322A : 115	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Chloroform	0.25	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-037
Client: AECOM - Honolulu
Collection Date: 03/17/2022 16:25
Client Sample ID: ERH2788 (OWDFMW08A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Surr: Dibromofluoromethane	110.0	%REC	1		80-119				SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Surr: 1,2-Dichloroethane-d4	114.0	%REC	1		81-118				SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/23/2022 13:54/msc	VOA5975C.I_220323A : 8	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 01:18/clt	GECD.I_220321A : 30	164679
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/22/2022 01:18/clt	GECD.I_220321A : 30	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/23/2022 09:47/jp	VARIAN1_220321A : 50	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/23/2022 09:47/jp	VARIAN1_220321A : 50	R376668
Surr: Trifluorotoluene	70.0	%REC	1		70-130				SW8015C	03/23/2022 09:47/jp	VARIAN1_220321A : 50	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/22/2022 18:56/amn	GCFID-HP5-B_220322A : 10	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/22/2022 18:56/amn	GCFID-HP5-B_220322A : 10	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/22/2022 18:56/amn	GCFID-HP5-B_220322A : 10	164697
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/22/2022 18:56/amn	GCFID-HP5-B_220322A : 10	164697
Surr: n-Triacontane	92.0	%REC	1		50-150				SW8015C	03/22/2022 18:56/amn	GCFID-HP5-B_220322A : 10	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-037
Client: AECOM - Honolulu
Collection Date: 03/17/2022 16:25
Client Sample ID: ERH2788 (OWDFMW08A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:22/jdw	FID-HEADSPACE_220321B : 19	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2789 (OWDFMW08A FD)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-038
Collection Date: 03/17/2022 16:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Chloroform	0.26	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Toluene	ND	ug/L	1	UT	1.0	0.20	0.068		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-038
Client: AECOM - Honolulu
Collection Date: 03/17/2022 16:25
Client Sample ID: ERH2789 (OWDFMW08A FD)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Surr: Dibromofluoromethane	106.0	%REC	1		80-119				SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/23/2022 14:21/msc	VOA5975C.I_220323A : 9	R377820
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/23/2022 09:13/jp	VARIAN1_220321A : 49	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/23/2022 09:13/jp	VARIAN1_220321A : 49	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/23/2022 09:13/jp	VARIAN1_220321A : 49	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/22/2022 19:39/amn	GCFID-HP5-B_220322A : 11	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/22/2022 19:39/amn	GCFID-HP5-B_220322A : 11	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/22/2022 19:39/amn	GCFID-HP5-B_220322A : 11	164697
Surr: o-Terphenyl	94.0	%REC	1		56-125				SW8015C	03/22/2022 19:39/amn	GCFID-HP5-B_220322A : 11	164697
Surr: n-Triacontane	89.0	%REC	1		50-150				SW8015C	03/22/2022 19:39/amn	GCFID-HP5-B_220322A : 11	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2787 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-039
Collection Date: 03/17/2022 14:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Toluene	0.11	ug/L	1	J	1.0	0.20	0.068		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-039
Client: AECOM - Honolulu
Collection Date: 03/17/2022 14:25
Client Sample ID: ERH2787 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Surr: Toluene-d8	92.0	%REC	1		89-112				SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/23/2022 17:32/msc	VOA5975C.I_220323A : 16	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-040
Client: AECOM - Honolulu
Collection Date: 03/17/2022 16:25
Client Sample ID: ERH2787 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 14:20/jp	VARIAN1_220321A : 36	R376668
Total Purgeable Hydrocarbons	3.4	ug/L	1	J	20	10	3.1		SW8015C	03/22/2022 14:20/jp	VARIAN1_220321A : 36	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/22/2022 14:20/jp	VARIAN1_220321A : 36	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-041
Client: AECOM - Honolulu
Collection Date: 03/17/2022 16:25
Client Sample ID: ERH2787 (Trip Blank)-14733
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 01:37/clt	GECD.I_220321A : 31	164679
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/22/2022 01:37/clt	GECD.I_220321A : 31	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2787 (Trip Blank)-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-042
Collection Date: 03/17/2022 16:25
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:26/jdw	FID-HEADSPACE_220321B : 20	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2830 (OWDFMW05A)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-043
Collection Date: 03/17/2022 13:20
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.44	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 03:56/eli-ca	SUB-C280786 : 19	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 02:10/car	ICPMS207-B_220322A : 116	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/23/2022 02:54/car	ICPMS207-B_220322A : 123	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-043
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:20
Client Sample ID: ERH2830 (OWDFMW05A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Surr: Dibromofluoromethane	103.0	%REC	1		80-119				SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Surr: 1,2-Dichloroethane-d4	104.0	%REC	1		81-118				SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Surr: Toluene-d8	90.0	%REC	1		89-112				SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
Surr: p-Bromofluorobenzene	102.0	%REC	1		85-114				SW8260B	03/23/2022 14:48/msc	VOA5975C.I_220323A : 10	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 01:57/clt	GECD.I_220321A : 32	164679
Surr: 1,1,1,2-Tetrachloroethane	90.0	%REC	1		70-130				SW8011	03/22/2022 01:57/clt	GECD.I_220321A : 32	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/23/2022 10:21/jp	VARIAN1_220321A : 51	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	UT	20	10	3.1		SW8015C	03/23/2022 10:21/jp	VARIAN1_220321A : 51	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/23/2022 10:21/jp	VARIAN1_220321A : 51	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.21	mg/L	1	J	0.30	0.014	0.037		SW8015C	03/22/2022 20:22/amn	GCFID-HP5-B_220322A : 12	164697
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/24/2022 23:13/amn	GCFID-HP5-B_220324A : 15	164697
Oil Range Hydrocarbons (C24 to C40)	0.28	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/22/2022 20:22/amn	GCFID-HP5-B_220322A : 12	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/24/2022 23:13/amn	GCFID-HP5-B_220324A : 15	164697
Total Extractable Hydrocarbons	0.53	mg/L	1		0.30	0.14	0.071		SW8015C	03/22/2022 20:22/amn	GCFID-HP5-B_220322A : 12	164697
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/24/2022 23:13/amn	GCFID-HP5-B_220324A : 15	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-043
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:20
Client Sample ID: ERH2830 (OWDFMW05A)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	03/22/2022 20:22/amn	GCFID-HP5-B_220322A : 12	164697
Surr: o-Terphenyl (SGT)	88.0	%REC	1		56-125				SW8015C	03/24/2022 23:13/amn	GCFID-HP5-B_220324A : 15	164697
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/22/2022 20:22/amn	GCFID-HP5-B_220322A : 12	164697
Surr: n-Triacontane (SGT)	80.0	%REC	1		50-150				SW8015C	03/24/2022 23:13/amn	GCFID-HP5-B_220324A : 15	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0032	mg/L	1		0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:30/jdw	FID-HEADSPACE_220321B : 21	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2829 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-044
Collection Date: 03/17/2022 13:20
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-044
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:20
Client Sample ID: ERH2829 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Surr: Dibromofluoromethane	112.0	%REC	1		80-119				SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Surr: 1,2-Dichloroethane-d4	112.0	%REC	1		81-118				SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Surr: Toluene-d8	91.0	%REC	1		89-112				SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820
Surr: p-Bromofluorobenzene	106.0	%REC	1		85-114				SW8260B	03/23/2022 18:00/msc	VOA5975C.I_220323A : 17	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-045
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:20
Client Sample ID: ERH2829 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 14:54/jp	VARIAN1_220321A : 37	R376668
Total Purgeable Hydrocarbons	3.1	ug/L	1	J	20	10	3.1		SW8015C	03/22/2022 14:54/jp	VARIAN1_220321A : 37	R376668
Surr: Trifluorotoluene	74.0	%REC	1		70-130				SW8015C	03/22/2022 14:54/jp	VARIAN1_220321A : 37	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-046
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:20
Client Sample ID: ERH2829 (Trip Blank)-14694
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 02:16/clt	GECD.I_220321A : 33	164679
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/22/2022 02:16/clt	GECD.I_220321A : 33	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2829 (Trip Blank)-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-047
Collection Date: 03/17/2022 13:20
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:43/jdw	FID-HEADSPACE_220321B : 23	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2844 (RHMW2254-01 B)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-048
Collection Date: 03/17/2022 13:00
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.39	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 04:38/eli-ca	SUB-C280786 : 20	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 03:31/car	ICPMS207-B_220322A : 129	R376663
METALS, TOTAL												
Lead	0.00034	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/23/2022 03:38/car	ICPMS207-B_220322A : 130	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Chloroform	0.12	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-048
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2844 (RHMW2254-01 B)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
m+p-Xylenes	0.23	ug/L	1	J	1.0	0.50	0.15		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
o-Xylene	0.11	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Xylenes, Total	0.34	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Surr: Toluene-d8	93.0	%REC	1		89-112				SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
Surr: p-Bromofluorobenzene	105.0	%REC	1		85-114				SW8260B	03/23/2022 15:16/msc	VOA5975C.I_220323A : 11	R377820
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 02:36/clt	GECD.I_220321A : 34	164679
Surr: 1,1,1,2-Tetrachloroethane	91.0	%REC	1		70-130				SW8011	03/22/2022 02:36/clt	GECD.I_220321A : 34	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.1	ug/L	1	J	20	8.7	2.0		SW8015C	03/23/2022 10:55/jp	VARIAN1_220321A : 52	R376668
Total Purgeable Hydrocarbons	24	ug/L	1		20	10	3.1		SW8015C	03/23/2022 10:55/jp	VARIAN1_220321A : 52	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/23/2022 10:55/jp	VARIAN1_220321A : 52	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.15	mg/L	1	J	0.30	0.015	0.038		SW8015C	03/23/2022 16:22/amn	GCFID-HP5-B_220322A : 29	164697
Diesel Range Organics (SGT-C10 to C24)	0.096	mg/L	1	J	0.30	0.12	0.027		SW8015C	03/25/2022 03:31/amn	GCFID-HP5-B_220324A : 19	164697
Oil Range Hydrocarbons (C24 to C40)	0.12	mg/L	1	J	0.30	0.15	0.085		SW8015C	03/23/2022 16:22/amn	GCFID-HP5-B_220322A : 29	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.15	0.085		SW8015C	03/25/2022 03:31/amn	GCFID-HP5-B_220324A : 19	164697
Total Extractable Hydrocarbons	0.30	mg/L	1		0.30	0.15	0.073		SW8015C	03/23/2022 16:22/amn	GCFID-HP5-B_220322A : 29	164697
Total Extractable Hydrocarbons (SGT)	0.10	mg/L	1	J	0.30	0.12	0.035		SW8015C	03/25/2022 03:31/amn	GCFID-HP5-B_220324A : 19	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-048
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2844 (RHMW2254-01 B)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	66.0	%REC	1		56-125				SW8015C	03/23/2022 16:22/amn	GCFID-HP5-B_220322A : 29	164697
Surr: o-Terphenyl (SGT)	67.0	%REC	1		56-125				SW8015C	03/25/2022 03:31/amn	GCFID-HP5-B_220324A : 19	164697
Surr: n-Triacontane	88.0	%REC	1		50-150				SW8015C	03/23/2022 16:22/amn	GCFID-HP5-B_220322A : 29	164697
Surr: n-Triacontane (SGT)	88.0	%REC	1		50-150				SW8015C	03/25/2022 03:31/amn	GCFID-HP5-B_220324A : 19	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:47/jdw	FID-HEADSPACE_220321B : 24	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2843 (Trip Blank)-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-049
Collection Date: 03/17/2022 13:00
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-049
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2843 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Surr: Dibromofluoromethane	111.0	%REC	1		80-119				SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Surr: 1,2-Dichloroethane-d4	111.0	%REC	1		81-118				SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Surr: Toluene-d8	90.0	%REC	1		89-112				SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/23/2022 18:27/msc	VOA5975C.I_220323A : 18	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-050
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2843 (Trip Blank)-14754
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 15:28/jp	VARIAN1_220321A : 38	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 15:28/jp	VARIAN1_220321A : 38	R376668
Surr: Trifluorotoluene	75.0	%REC	1		70-130				SW8015C	03/22/2022 15:28/jp	VARIAN1_220321A : 38	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-051
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2843 (Trip Blank)-14733
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 02:56/clt	GECD.I_220321A : 35	164679
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/22/2022 02:56/clt	GECD.I_220321A : 35	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-052
Client: AECOM - Honolulu
Collection Date: 03/17/2022 13:00
Client Sample ID: ERH2843 (Trip Blank)-14808
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/21/2022 15:51/jdw	FID-HEADSPACE_220321B : 25	R376543

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2850 (Sump Adit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-053
Collection Date: 03/17/2022 15:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.5 to 0.5	0.52	mg/L	1		0.50	0.50	0.17		SW9060A	03/23/2022 05:20/eli-ca	SUB-C280786 : 21	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 03:44/car	ICPMS207-B_220322A : 131	R376663
METALS, TOTAL												
Lead	0.00017	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/23/2022 04:02/car	ICPMS207-B_220322A : 134	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Chloroform	0.11	ug/L	1	J	1.0	0.20	0.079		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2850 (Sump Adit 3)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-053
Collection Date: 03/17/2022 15:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
m+p-Xylenes	0.24	ug/L	1	J	1.0	0.50	0.15		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
o-Xylene	0.12	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Xylenes, Total	0.35	ug/L	1	J	1.0	0.20	0.060		SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Surr: Toluene-d8	95.0	%REC	1		89-112				SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/24/2022 17:05/msc	VOA5975C.I_220324A : 9	R377852
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 04:15/clt	GECD.I_220321A : 37	164679
Surr: 1,1,1,2-Tetrachloroethane	99.0	%REC	1		70-130				SW8011	03/22/2022 04:15/clt	GECD.I_220321A : 37	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	4.2	ug/L	1	J	20	8.7	2.0		SW8015C	03/23/2022 12:04/jp	VARIAN1_220321A : 53	R376668
Total Purgeable Hydrocarbons	51	ug/L	1	T	20	10	3.1		SW8015C	03/23/2022 12:04/jp	VARIAN1_220321A : 53	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/23/2022 12:04/jp	VARIAN1_220321A : 53	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.15	mg/L	1	J	0.30	0.014	0.037		SW8015C	03/23/2022 17:05/amn	GCFID-HP5-B_220322A : 30	164697
Diesel Range Organics (SGT-C10 to C24)	0.063	mg/L	1	J	0.30	0.12	0.027		SW8015C	03/25/2022 04:14/amn	GCFID-HP5-B_220324A : 20	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.085		SW8015C	03/23/2022 17:05/amn	GCFID-HP5-B_220322A : 30	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.085		SW8015C	03/25/2022 04:14/amn	GCFID-HP5-B_220324A : 20	164697
Total Extractable Hydrocarbons	0.16	mg/L	1	J	0.30	0.14	0.072		SW8015C	03/23/2022 17:05/amn	GCFID-HP5-B_220322A : 30	164697
Total Extractable Hydrocarbons (SGT)	0.071	mg/L	1	J	0.30	0.12	0.034		SW8015C	03/25/2022 04:14/amn	GCFID-HP5-B_220324A : 20	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-053
Client: AECOM - Honolulu
Collection Date: 03/17/2022 15:05
Client Sample ID: ERH2850 (Sump Adit 3)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	98.0	%REC	1		56-125				SW8015C	03/23/2022 17:05/amn	GCFID-HP5-B_220322A : 30	164697
Surr: o-Terphenyl (SGT)	89.0	%REC	1		56-125				SW8015C	03/25/2022 04:14/amn	GCFID-HP5-B_220324A : 20	164697
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/23/2022 17:05/amn	GCFID-HP5-B_220322A : 30	164697
Surr: n-Triacontane (SGT)	78.0	%REC	1		50-150				SW8015C	03/25/2022 04:14/amn	GCFID-HP5-B_220324A : 20	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	0.0015	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/22/2022 09:35/jdw	FID-HEADSPACE_220322A : 5	R376545

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2849 (Trip Blank)-14694
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-054
Collection Date: 03/17/2022 15:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-054
Client: AECOM - Honolulu
Collection Date: 03/17/2022 15:05
Client Sample ID: ERH2849 (Trip Blank)-14694
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Surr: Dibromofluoromethane	108.0	%REC	1		80-119				SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Surr: Toluene-d8	92.0	%REC	1		89-112				SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/23/2022 18:55/msc	VOA5975C.I_220323A : 19	R377820

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-055
Client: AECOM - Honolulu
Collection Date: 03/17/2022 15:05
Client Sample ID: ERH2849 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/23/2022 14:21/jp	VARIAN1_220321A : 55	R376668
Total Purgeable Hydrocarbons	3.3	ug/L	1	J	20	10	3.1		SW8015C	03/23/2022 14:21/jp	VARIAN1_220321A : 55	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/23/2022 14:21/jp	VARIAN1_220321A : 55	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-056
Client: AECOM - Honolulu
Collection Date: 03/17/2022 15:05
Client Sample ID: ERH2849 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 04:34/clt	GECD.I_220321A : 38	164679
Surr: 1,1,1,2-Tetrachloroethane	88.0	%REC	1		70-130				SW8011	03/22/2022 04:34/clt	GECD.I_220321A : 38	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-057
Client: AECOM - Honolulu
Collection Date: 03/17/2022 15:05
Client Sample ID: ERH2849 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/22/2022 09:47/jdw	FID-HEADSPACE_220322A : 7	R376545

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2847 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-058
Collection Date: 03/17/2022 14:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.2 to 0.2	0.24	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 06:02/eli-ca	SUB-C280786 : 22	C_R280786
METALS, DISSOLVED												
Lead	ND	mg/L	1	U	0.001	0.00005	0.00003		SW6020	03/23/2022 04:09/car	ICPMS207-B_220322A : 135	R376663
METALS, TOTAL												
Lead	ND	mg/L	1	U	0.001	0.0001	0.00005		SW6020	03/23/2022 04:15/car	ICPMS207-B_220322A : 136	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2847 (RHMW2254-01 LF)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-058
Collection Date: 03/17/2022 14:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Surr: Toluene-d8	94.0	%REC	1		89-112				SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
Surr: p-Bromofluorobenzene	110.0	%REC	1		85-114				SW8260B	03/24/2022 17:32/msc	VOA5975C.I_220324A : 10	R377852
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0049	0.0025		SW8011	03/22/2022 04:54/clt	GECD.I_220321A : 39	164679
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/22/2022 04:54/clt	GECD.I_220321A : 39	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/23/2022 13:13/jp	VARIAN1_220321A : 54	R376668
Total Purgeable Hydrocarbons	4.0	ug/L	1	J	20	10	3.1		SW8015C	03/23/2022 13:13/jp	VARIAN1_220321A : 54	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/23/2022 13:13/jp	VARIAN1_220321A : 54	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	0.13	mg/L	1	J	0.30	0.014	0.037		SW8015C	03/23/2022 00:39/amn	GCFID-HP5-B_220322A : 15	164697
Diesel Range Organics (SGT-C10 to C24)	ND	mg/L	1	U	0.30	0.11	0.027		SW8015C	03/24/2022 23:56/amn	GCFID-HP5-B_220324A : 16	164697
Oil Range Hydrocarbons (C24 to C40)	0.26	mg/L	1	J	0.30	0.14	0.084		SW8015C	03/23/2022 00:39/amn	GCFID-HP5-B_220322A : 15	164697
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/24/2022 23:56/amn	GCFID-HP5-B_220324A : 16	164697
Total Extractable Hydrocarbons	0.40	mg/L	1		0.30	0.14	0.071		SW8015C	03/23/2022 00:39/amn	GCFID-HP5-B_220322A : 15	164697
Total Extractable Hydrocarbons (SGT)	ND	mg/L	1	U	0.30	0.11	0.034		SW8015C	03/24/2022 23:56/amn	GCFID-HP5-B_220324A : 16	164697

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-058
Client: AECOM - Honolulu
Collection Date: 03/17/2022 14:05
Client Sample ID: ERH2847 (RHMW2254-01 LF)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Surr: o-Terphenyl	97.0	%REC	1		56-125				SW8015C	03/23/2022 00:39/amn	GCFID-HP5-B_220322A : 15	164697
Surr: o-Terphenyl (SGT)	91.0	%REC	1		56-125				SW8015C	03/24/2022 23:56/amn	GCFID-HP5-B_220324A : 16	164697
Surr: n-Triacontane	90.0	%REC	1		50-150				SW8015C	03/23/2022 00:39/amn	GCFID-HP5-B_220322A : 15	164697
Surr: n-Triacontane (SGT)	83.0	%REC	1		50-150				SW8015C	03/24/2022 23:56/amn	GCFID-HP5-B_220324A : 16	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/22/2022 09:52/jdw	FID-HEADSPACE_220322A : 8	R376545

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2846 (Trip Blank)-14833
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-059
Collection Date: 03/17/2022 14:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-059
Client: AECOM - Honolulu
Collection Date: 03/17/2022 14:05
Client Sample ID: ERH2846 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Surr: Dibromofluoromethane	107.0	%REC	1		80-119				SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Surr: Toluene-d8	96.0	%REC	1		89-112				SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852
Surr: p-Bromofluorobenzene	109.0	%REC	1		85-114				SW8260B	03/24/2022 19:22/msc	VOA5975C.I_220324A : 14	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-060
Client: AECOM - Honolulu
Collection Date: 03/17/2022 14:05
Client Sample ID: ERH2846 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	ND	ug/L	1	U	20	8.7	2.0		SW8015C	03/22/2022 16:03/jp	VARIAN1_220321A : 39	R376668
Total Purgeable Hydrocarbons	ND	ug/L	1	U	20	10	3.1		SW8015C	03/22/2022 16:03/jp	VARIAN1_220321A : 39	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/22/2022 16:03/jp	VARIAN1_220321A : 39	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-061
Client: AECOM - Honolulu
Collection Date: 03/17/2022 14:05
Client Sample ID: ERH2846 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 05:14/clt	GECD.I_220321A : 40	164679
Surr: 1,1,1,2-Tetrachloroethane	89.0	%REC	1		70-130				SW8011	03/22/2022 05:14/clt	GECD.I_220321A : 40	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2846 (Trip Blank)-14895
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-062
Collection Date: 03/17/2022 14:05
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/22/2022 09:57/jdw	FID-HEADSPACE_220322A : 9	R376545

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2853 (RHMW11-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-063
Collection Date: 03/17/2022 12:40
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
AGGREGATE ORGANICS												
Organic Carbon, Total (TOC) - TOC Range is 0.4 to 0.4	0.36	mg/L	1	J	0.50	0.50	0.17		SW9060A	03/23/2022 06:42/eli-ca	SUB-C280786 : 23	C_R280786
METALS, DISSOLVED												
Lead	0.00008	mg/L	1	J	0.001	0.00005	0.00003		SW6020	03/23/2022 08:49/car	ICPMS207-B_220322A : 137	R376663
METALS, TOTAL												
Lead	0.00007	mg/L	1	J	0.001	0.0001	0.00005		SW6020	03/23/2022 08:56/car	ICPMS207-B_220322A : 138	164712
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2853 (RHMW11-5)
Project: CV18F0126, 60571032.02.46.01
Matrix: Ground Water

Lab ID: B22031470-063
Collection Date: 03/17/2022 12:40
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Styrene	0.12	ug/L	1	J	1.0	0.20	0.067		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Surr: Dibromofluoromethane	109.0	%REC	1		80-119				SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Surr: 1,2-Dichloroethane-d4	110.0	%REC	1		81-118				SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
Surr: p-Bromofluorobenzene	113.0	%REC	1		85-114				SW8260B	03/24/2022 18:00/msc	VOA5975C.I_220324A : 11	R377852
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 05:33/clt	GECD.I_220321A : 41	164679
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/22/2022 05:33/clt	GECD.I_220321A : 41	164679
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	2.1	ug/L	1	JT	20	8.7	2.0		SW8015C	03/23/2022 14:56/jp	VARIAN1_220321A : 56	R376668
Total Purgeable Hydrocarbons	3.3	ug/L	1	JT	20	10	3.1		SW8015C	03/23/2022 14:56/jp	VARIAN1_220321A : 56	R376668
Surr: Trifluorotoluene	71.0	%REC	1		70-130				SW8015C	03/23/2022 14:56/jp	VARIAN1_220321A : 56	R376668
- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.												
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.												
PETROLEUM HYDROCARBONS-SEMI-VOLATILE												
Diesel Range Organics (C10 to C24)	ND	mg/L	1	U	0.30	0.014	0.037		SW8015C	03/23/2022 14:56/amn	GCFID-HP5-B_220322A : 27	164697
Oil Range Hydrocarbons (C24 to C40)	ND	mg/L	1	U	0.30	0.14	0.084		SW8015C	03/23/2022 14:56/amn	GCFID-HP5-B_220322A : 27	164697
Total Extractable Hydrocarbons	ND	mg/L	1	U	0.30	0.14	0.071		SW8015C	03/23/2022 14:56/amn	GCFID-HP5-B_220322A : 27	164697
Surr: o-Terphenyl	99.0	%REC	1		56-125				SW8015C	03/23/2022 14:56/amn	GCFID-HP5-B_220322A : 27	164697
Surr: n-Triacontane	93.0	%REC	1		50-150				SW8015C	03/23/2022 14:56/amn	GCFID-HP5-B_220322A : 27	164697
- Note: Total Extractable Hydrocarbons are defined as the total hydrocarbon responses regardless of elution time.												
- Since there were no detectable hydrocarbons, Silica Gel Treatment (SGT) results are equivalent to non-SGT results.												

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-063
Client: AECOM - Honolulu
Collection Date: 03/17/2022 12:40
Client Sample ID: ERH2853 (RHMW11-5)
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Ground Water
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	0.0012	mg/L	1	J	0.0020	0.0012	0.00070		SW8015M	03/22/2022 10:01/jdw	FID-HEADSPACE_220322A : 10	R376545

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Client Sample ID: ERH2852 (Trip Blank)-14894
Project: CV18F0126, 60571032.02.46.01
Matrix: Trip Blank

Lab ID: B22031470-064
Collection Date: 03/17/2022 12:40
Date Received: 03/19/2022
Report Date: 03/28/2022
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
Benzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Bromobenzene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Bromochloromethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Bromodichloromethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Bromoform	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Carbon tetrachloride	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Chlorobenzene	ND	ug/L	1	U	1.0	0.20	0.091		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Chlorodibromomethane	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Chloroethane	ND	ug/L	1	U	1.0	0.50	0.17		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Chloroform	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Chloromethane	ND	ug/L	1	U	1.0	0.50	0.16		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,2-Dibromoethane	ND	ug/L	1	U	1.0	0.20	0.092		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
2-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.088		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
4-Chlorotoluene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Dibromomethane	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,2-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.075		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,3-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.080		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,4-Dichlorobenzene	ND	ug/L	1	U	1.0	0.20	0.086		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Dichlorodifluoromethane	ND	ug/L	1	U	1.0	0.50	0.18		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1-Dichloroethane	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,2-Dichloroethane	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1-Dichloroethene	ND	ug/L	1	U	1.0	0.50	0.14		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
cis-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
trans-1,2-Dichloroethene	ND	ug/L	1	U	1.0	0.25	0.12		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,2-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,3-Dichloropropane	ND	ug/L	1	U	1.0	0.20	0.079		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
2,2-Dichloropropane	ND	ug/L	1	U	1.0	0.50	0.19		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.083		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
cis-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.073		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
trans-1,3-Dichloropropene	ND	ug/L	1	U	1.0	0.20	0.085		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Ethylbenzene	ND	ug/L	1	U	1.0	0.20	0.084		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Methyl ethyl ketone	ND	ug/L	1	U	20	5.0	1.8		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Methyl tert-butyl ether (MTBE)	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Methylene chloride	ND	ug/L	1	U	1.0	0.50	0.34		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Styrene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1,1,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.25	0.10		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1,2,2-Tetrachloroethane	ND	ug/L	1	U	1.0	0.20	0.087		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Tetrachloroethene	ND	ug/L	1	U	1.0	0.20	0.067		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Toluene	ND	ug/L	1	U	1.0	0.20	0.068		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-064
Client: AECOM - Honolulu
Collection Date: 03/17/2022 12:40
Client Sample ID: ERH2852 (Trip Blank)-14894
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOLATILE ORGANIC COMPOUNDS												
1,1,1-Trichloroethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,1,2-Trichloroethane	ND	ug/L	1	U	1.0	0.25	0.11		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Trichloroethene	ND	ug/L	1	U	1.0	0.20	0.099		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Trichlorofluoromethane	ND	ug/L	1	U	1.0	0.50	0.13		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
1,2,3-Trichloropropane	ND	ug/L	1	U	1.0	0.50	0.24		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Vinyl chloride	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
m+p-Xylenes	ND	ug/L	1	U	1.0	0.50	0.15		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
o-Xylene	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Xylenes, Total	ND	ug/L	1	U	1.0	0.20	0.060		SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Surr: Dibromofluoromethane	104.0	%REC	1		80-119				SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Surr: 1,2-Dichloroethane-d4	108.0	%REC	1		81-118				SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Surr: Toluene-d8	97.0	%REC	1		89-112				SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852
Surr: p-Bromofluorobenzene	108.0	%REC	1		85-114				SW8260B	03/24/2022 19:49/msc	VOA5975C.I_220324A : 15	R377852

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-065
Client: AECOM - Honolulu
Collection Date: 03/17/2022 12:40
Client Sample ID: ERH2852 (Trip Blank)-14833
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
PETROLEUM HYDROCARBONS-VOLATILE												
C6 to C10	3.3	ug/L	1	J	20	8.7	2.0		SW8015C	03/22/2022 16:37/jp	VARIAN1_220321A : 40	R376668
Total Purgeable Hydrocarbons	4.5	ug/L	1	J	20	10	3.1		SW8015C	03/22/2022 16:37/jp	VARIAN1_220321A : 40	R376668
Surr: Trifluorotoluene	73.0	%REC	1		70-130				SW8015C	03/22/2022 16:37/jp	VARIAN1_220321A : 40	R376668

- Note 1: C6 to C10 is defined as all hydrocarbons eluting between 2-Methylpentane and 1,2,4-Trimethylbenzene.
- Note 2: Total Purgeable Hydrocarbons are defined as the total hydrocarbon response regardless of elution time.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-066
Client: AECOM - Honolulu
Collection Date: 03/17/2022 12:40
Client Sample ID: ERH2852 (Trip Blank)-14525
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
VOCS BY MICROEXTRACTION-ECD												
1,2-Dibromoethane	ND	ug/L	1	U	0.010	0.0048	0.0025		SW8011	03/22/2022 05:53/clt	GECD.I_220321A : 42	164679
Surr: 1,1,1,2-Tetrachloroethane	87.0	%REC	1		70-130				SW8011	03/22/2022 05:53/clt	GECD.I_220321A : 42	164679

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Lab ID: B22031470-067
Client: AECOM - Honolulu
Collection Date: 03/17/2022 12:40
Client Sample ID: ERH2852 (Trip Blank)-14895
Date Received: 03/19/2022
Project: CV18F0126, 60571032.02.46.01
Report Date: 03/28/2022
Matrix: Trip Blank
Revised Date: 03/31/2022

Analyses	Result	Units	DF	Qual	LOQ	LOD	DL	MCL	Method	Analysis Date / By	RunID : Run Order	BatchID
ORGANIC CHARACTERISTICS												
Methane	ND	mg/L	1	U	0.0020	0.0012	0.00070		SW8015M	03/22/2022 10:07/jdw	FID-HEADSPACE_220322A : 11	R376545

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: SUB-C280786: 2 **SampType:** Method Blank **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/22/2022 16:15 **Prep Date:**
Lab ID: MBLK **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	ND	0.20									

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 0.1 to 0.1

Run ID: Run Order: SUB-C280786: 1 **SampType:** Laboratory Control Sample **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/22/2022 15:35 **Prep Date:**
Lab ID: LCS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	5.0	0.50	5.0		99.0	91	111				

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 4.9 to 5.0

Run ID: Run Order: SUB-C280786: 5 **SampType:** Sample Matrix Spike **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/22/2022 18:17 **Prep Date:**
Lab ID: C22030760-001DMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	13	0.50	5.0	7.8	101.0	91	111				

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 13 to 13

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: SUB-C280786: 6 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/22/2022 19:00 **Prep Date:**
Lab ID: C22030760-001DMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	13	0.50	5.0	7.8	99.0	91	111	13	0.6	10.0	

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 13 to 13

Run ID: Run Order: SUB-C280786: 3 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/22/2022 16:54 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.9	0.50	5.0		98.0	90	110				

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 4.9 to 4.9

Run ID: Run Order: SUB-C280786: 9 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/23/2022 01:55 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.9	0.50	5.0		97.0	90	110				

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 4.8 to 4.9

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: SUB-C280786: 10 **SampType:** Continuing Calibration Verification Standard **Batch ID:** C_R280786
Method: SW9060A **Analysis Date:** 03/23/2022 07:22 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Organic Carbon, Total (TOC)	4.8	0.50	5.0		96.0	90	110				

Associated Samples: **B22031470-001D, B22031470-006D, B22031470-011D, B22031470-016D, B22031470-022D, B22031470-027D, B22031470-032D, B22031470-037D, B22031470-043D, B22031470-048D, B22031470-053D, B22031470-058D, B22031470-063D**

- TOC Range is 4.8 to 4.8

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 23 **SampType:** Laboratory Fortified Blank **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 16:29 **Prep Date:**
Lab ID: LFB **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.050		97.0	88	115				

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 22 **SampType:** Method Blank **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 16:22 **Prep Date:**
Lab ID: LRB **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.0005									

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 75 **SampType:** Sample Matrix Spike **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 21:53 **Prep Date:**
Lab ID: B22031470-001AMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.047	0.001	0.050	0.00	94.0	88	115				

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 76 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 21:59 **Prep Date:**
Lab ID: B22031470-001AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.047	0.001	0.050	0.00	94.0	88	115	0.047	0.5	20.0	

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 120 **SampType:** Sample Matrix Spike **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 02:35 **Prep Date:**
Lab ID: B22031470-043AMS **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.050	0.00	99.0	88	115				

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 121 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 02:41 **Prep Date:**
Lab ID: B22031470-043AMSD **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.050	0.001	0.050	0.00	99.0	88	115	0.049	0.9	20.0	

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 74 **SampType:** Serial Dilution **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 21:46 **Prep Date:**
Lab ID: B22031470-001ADIL **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0.00		10.0	

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 117 **SampType:** Serial Dilution **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 02:17 **Prep Date:**
Lab ID: B22031470-043ADIL **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0.00		10.0	

Associated Samples: **B22031470-001A, B22031470-006A, B22031470-011A, B22031470-016A, B22031470-022A, B22031470-027A, B22031470-032A, B22031470-037A, B22031470-043A, B22031470-048A, B22031470-053A, B22031470-058A, B22031470-063A**

Run ID: Run Order: ICPMS207-B_220322A: 32 **SampType:** Laboratory Control Sample **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/22/2022 17:25 **Prep Date:** 03/21/2022 16:12
Lab ID: LCS4-164712 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.096	0.001	0.100		96.0	88	115				

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 125 **SampType:** Post Digestion/Distillation Spike **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/23/2022 03:06 **Prep Date:** 03/21/2022 16:32
Lab ID: B22031470-043BPDS1 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.052	0.00	94.0	80	120				

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 126 **SampType:** Matrix Spike **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/23/2022 03:13 **Prep Date:** 03/21/2022 16:32
Lab ID: B22031470-043BMS4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.099	0.001	0.100	0.00	99.0	88	115				

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 127 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/23/2022 03:19 **Prep Date:** 03/21/2022 16:32
Lab ID: B22031470-043BMSD4 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.099	0.001	0.100	0.00	99.0	88	115	0.099	0.3	20.0	

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 31 **SampType:** Method Blank **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/22/2022 17:19 **Prep Date:** 03/21/2022 16:12
Lab ID: MB-164712 **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.0005									

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 124 **SampType:** Serial Dilution **Batch ID:** 164712
Method: SW6020 **Analysis Date:** 03/23/2022 03:00 **Prep Date:** 03/21/2022 16:32
Lab ID: B22031470-043BDIL **Units:** mg/L **Prep Method:** SW3010A

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	ND	0.001						0.00		10.0	

Associated Samples: **B22031470-001B, B22031470-006B, B22031470-011B, B22031470-016B, B22031470-022B, B22031470-027B, B22031470-032B, B22031470-037B, B22031470-043B, B22031470-048B, B22031470-053B, B22031470-058B, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 67 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 21:03 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.047	0.001	0.050		95.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 81 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 22:30 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.050		97.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 87 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/22/2022 23:08 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.050		96.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 106 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 01:08 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.049	0.001	0.050		97.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: ICPMS207-B_220322A: 118 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 02:23 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.050		96.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 132 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 03:50 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.048	0.001	0.050		96.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Run ID: Run Order: ICPMS207-B_220322A: 139 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376663
Method: SW6020 **Analysis Date:** 03/23/2022 09:02 **Prep Date:**
Lab ID: CCV **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	0.047	0.001	0.050		93.0	90	110				

Associated Samples: **B22031470-001A, B22031470-001B, B22031470-006A, B22031470-006B, B22031470-011A, B22031470-011B, B22031470-016A, B22031470-016B, B22031470-022A, B22031470-022B, B22031470-027A, B22031470-027B, B22031470-032A, B22031470-032B, B22031470-037A, B22031470-037B, B22031470-043A, B22031470-043B, B22031470-048A, B22031470-048B, B22031470-053A, B22031470-053B, B22031470-058A, B22031470-058B, B22031470-063A, B22031470-063B**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 4 **SampType:** Method Blank **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 12:22 **Prep Date:**
Lab ID: MBLK032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromochloromethane	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chlorodibromomethane	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
2-Chlorotoluene	ND	0.50									
Dibromomethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
4-Chlorotoluene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3-Dichloropropane	ND	0.50									
2,2-Dichloropropane	ND	0.50									

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 4 **SampType:** Method Blank **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 12:22 **Prep Date:**
Lab ID: MBLK032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		105.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		105.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	9.5	0.50	10		95.0	89	112				

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 11:27 **Prep Date:**
Lab ID: LCS032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0		104.0	79	120				
Bromobenzene	5.2	0.50	5.0		104.0	80	120				
Bromochloromethane	5.2	0.50	5.0		104.0	78	123				
Bromodichloromethane	5.3	0.50	5.0		107.0	79	125				
Bromoform	5.3	0.50	5.0		106.0	66	130				
Carbon tetrachloride	4.9	0.50	5.0		98.0	72	136				
Chlorobenzene	5.0	0.50	5.0		100.0	82	118				
Chlorodibromomethane	5.0	0.50	5.0		99.0	74	126				
Chloroethane	5.1	0.50	5.0		102.0	60	138				
Chloroform	5.1	0.50	5.0		102.0	79	124				
Chloromethane	4.8	0.50	5.0		96.0	50	139				
1,2-Dibromoethane	4.8	0.50	5.0		97.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0		106.0	79	122				
Dibromomethane	5.1	0.50	5.0		102.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0		103.0	80	119				
4-Chlorotoluene	5.5	0.50	5.0		111.0	78	122				
1,3-Dichlorobenzene	5.3	0.50	5.0		106.0	80	119				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	79	118				
Dichlorodifluoromethane	4.4	0.50	5.0		89.0	32	152				
1,1-Dichloroethane	5.3	0.50	5.0		106.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0		102.0	73	128				
1,1-Dichloroethene	5.4	0.50	5.0		108.0	71	131				
cis-1,2-Dichloroethene	5.3	0.50	5.0		105.0	78	123				
trans-1,2-Dichloroethene	5.2	0.50	5.0		104.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0		100.0	78	122				
1,3-Dichloropropane	4.8	0.50	5.0		96.0	80	119				
2,2-Dichloropropane	5.1	0.50	5.0		101.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 11:27 **Prep Date:**
Lab ID: LCS032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.9	0.50	5.0		98.0	79	125				
cis-1,3-Dichloropropene	4.5	0.50	5.0		91.0	75	124				
trans-1,3-Dichloropropene	5.3	0.50	5.0		106.0	73	127				
Ethylbenzene	4.9	0.50	5.0		98.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0		100.0	71	124				
Methyl ethyl ketone	53	10	50		106.0	56	143				
Methylene chloride	5.2	0.50	5.0		103.0	74	124				
Styrene	5.0	0.50	5.0		101.0	78	123				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		97.0	78	124				
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0		105.0	71	121				
Tetrachloroethene	4.6	0.50	5.0		92.0	74	129				
Toluene	5.2	0.50	5.0		104.0	80	121				
1,1,1-Trichloroethane	4.9	0.50	5.0		98.0	74	131				
1,1,2-Trichloroethane	5.1	0.50	5.0		102.0	80	119				
Trichloroethene	4.8	0.50	5.0		97.0	79	123				
Trichlorofluoromethane	4.8	0.50	5.0		96.0	65	141				
1,2,3-Trichloropropane	4.9	0.50	5.0		98.0	73	125				
Vinyl chloride	5.0	0.50	5.0		100.0	58	137				
m+p-Xylenes	9.7	0.50	10		97.0	80	121				
o-Xylene	4.9	0.50	5.0		99.0	78	122				
Xylenes, Total	15	0.50	15		98.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	85	114				
Surr: Toluene-d8	9.8	0.50	10		98.0	89	112				

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 20:06 **Prep Date:**
Lab ID: B22031463-011EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.5	0.50	5.0	0.0	110.0	79	120				
Bromobenzene	5.4	0.50	5.0	0.0	108.0	80	120				
Bromochloromethane	5.4	0.50	5.0	0.0	108.0	78	123				
Bromodichloromethane	5.5	0.50	5.0	0.0	110.0	79	125				
Bromoform	5.6	0.50	5.0	0.0	111.0	66	130				
Carbon tetrachloride	5.3	0.50	5.0	0.0	106.0	72	136				
Chlorobenzene	5.2	0.50	5.0	0.0	105.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0	0.0	102.0	74	126				
Chloroethane	5.1	0.50	5.0	0.0	101.0	60	138				
Chloroform	5.2	0.50	5.0	0.0	104.0	79	124				
Chloromethane	5.0	0.50	5.0	0.0	101.0	50	139				
1,2-Dibromoethane	5.2	0.50	5.0	0.0	104.0	78	122				
2-Chlorotoluene	5.5	0.50	5.0	0.0	111.0	79	122				
Dibromomethane	5.4	0.50	5.0	0.0	109.0	79	123				
1,2-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119				
4-Chlorotoluene	5.7	0.50	5.0	0.0	113.0	78	122				
1,3-Dichlorobenzene	5.4	0.50	5.0	0.0	108.0	80	119				
1,4-Dichlorobenzene	5.2	0.50	5.0	0.0	105.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0	0.0	89.0	32	152				
1,1-Dichloroethane	5.7	0.50	5.0	0.0	114.0	77	125				
1,2-Dichloroethane	5.1	0.50	5.0	0.0	103.0	73	128				
1,1-Dichloroethene	5.8	0.50	5.0	0.0	115.0	71	131				
cis-1,2-Dichloroethene	5.3	0.50	5.0	0.0	107.0	78	123				
trans-1,2-Dichloroethene	5.5	0.50	5.0	0.0	110.0	75	124				
1,2-Dichloropropane	5.3	0.50	5.0	0.0	105.0	78	122				
1,3-Dichloropropane	5.1	0.50	5.0	0.0	102.0	80	119				
2,2-Dichloropropane	5.1	0.50	5.0	0.0	102.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 22 **SampType:** Sample Matrix Spike **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 20:06 **Prep Date:**
Lab ID: B22031463-011EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.2	0.50	5.0	0.0	104.0	79	125				
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	97.0	75	124				
trans-1,3-Dichloropropene	5.5	0.50	5.0	0.0	110.0	73	127				
Ethylbenzene	5.3	0.50	5.0	0.0	105.0	79	121				
Methyl tert-butyl ether (MTBE)	5.0	0.50	5.0	0.0	100.0	71	124				
Methyl ethyl ketone	63	10	50	0.0	126.0	56	143				
Methylene chloride	5.6	0.50	5.0	0.0	111.0	74	124				
Styrene	5.1	0.50	5.0	0.0	103.0	78	123				
1,1,1,2-Tetrachloroethane	5.3	0.50	5.0	0.0	106.0	78	124				
1,1,2,2-Tetrachloroethane	5.6	0.50	5.0	0.0	113.0	71	121				
Tetrachloroethene	5.2	0.50	5.0	0.0	103.0	74	129				
Toluene	5.6	0.50	5.0	0.0	112.0	80	121				
1,1,1-Trichloroethane	5.2	0.50	5.0	0.0	105.0	74	131				
1,1,2-Trichloroethane	5.3	0.50	5.0	0.0	106.0	80	119				
Trichloroethene	5.4	0.50	5.0	0.0	108.0	79	123				
Trichlorofluoromethane	5.1	0.50	5.0	0.0	103.0	65	141				
1,2,3-Trichloropropane	5.3	0.50	5.0	0.0	107.0	73	125				
Vinyl chloride	5.1	0.50	5.0	0.0	102.0	58	137				
m+p-Xylenes	10	0.50	10	0.0	104.0	80	121				
o-Xylene	5.3	0.50	5.0	0.0	105.0	78	122				
Xylenes, Total	16	0.50	15	0.0	105.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114				
Surr: Toluene-d8	9.9	0.50	10	0.0	99.0	89	112				

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 20:33 **Prep Date:**
Lab ID: B22031463-011EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.8	0.50	5.0	0.0	116.0	79	120	5.5	5.3	20.0	
Bromobenzene	5.4	0.50	5.0	0.0	108.0	80	120	5.4	0.3	20.0	
Bromochloromethane	5.7	0.50	5.0	0.0	113.0	78	123	5.4	4.7	20.0	
Bromodichloromethane	5.7	0.50	5.0	0.0	114.0	79	125	5.5	3.6	20.0	
Bromoform	5.7	0.50	5.0	0.0	114.0	66	130	5.6	2.2	20.0	
Carbon tetrachloride	5.6	0.50	5.0	0.0	111.0	72	136	5.3	5.2	20.0	
Chlorobenzene	5.4	0.50	5.0	0.0	107.0	82	118	5.2	2.5	20.0	
Chlorodibromomethane	5.4	0.50	5.0	0.0	109.0	74	126	5.1	6.4	20.0	
Chloroethane	5.4	0.50	5.0	0.0	108.0	60	138	5.1	6.5	20.0	
Chloroform	5.5	0.50	5.0	0.0	109.0	79	124	5.2	4.9	20.0	
Chloromethane	5.1	0.50	5.0	0.0	102.0	50	139	5.0	1.5	20.0	
1,2-Dibromoethane	5.2	0.50	5.0	0.0	104.0	78	122	5.2	0.0	20.0	
2-Chlorotoluene	5.6	0.50	5.0	0.0	113.0	79	122	5.5	2.0	20.0	
Dibromomethane	5.4	0.50	5.0	0.0	107.0	79	123	5.4	1.3	20.0	
1,2-Dichlorobenzene	5.3	0.50	5.0	0.0	107.0	80	119	5.3	1.4	20.0	
4-Chlorotoluene	5.8	0.50	5.0	0.0	117.0	78	122	5.7	2.9	20.0	
1,3-Dichlorobenzene	5.7	0.50	5.0	0.0	114.0	80	119	5.4	5.0	20.0	
1,4-Dichlorobenzene	5.3	0.50	5.0	0.0	106.0	79	118	5.2	1.5	20.0	
Dichlorodifluoromethane	4.7	0.50	5.0	0.0	94.0	32	152	4.5	4.6	20.0	
1,1-Dichloroethane	5.9	0.50	5.0	0.0	117.0	77	125	5.7	2.6	20.0	
1,2-Dichloroethane	5.6	0.50	5.0	0.0	112.0	73	128	5.1	8.8	20.0	
1,1-Dichloroethene	5.7	0.50	5.0	0.0	114.0	71	131	5.8	0.8	20.0	
cis-1,2-Dichloroethene	5.5	0.50	5.0	0.0	110.0	78	123	5.3	2.9	20.0	
trans-1,2-Dichloroethene	5.5	0.50	5.0	0.0	111.0	75	124	5.5	1.0	20.0	
1,2-Dichloropropane	5.4	0.50	5.0	0.0	107.0	78	122	5.3	1.7	20.0	
1,3-Dichloropropane	5.2	0.50	5.0	0.0	104.0	80	119	5.1	2.6	20.0	
2,2-Dichloropropane	5.3	0.50	5.0	0.0	107.0	60	139	5.1	4.3	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 23 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 20:33 **Prep Date:**
Lab ID: B22031463-011EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.4	0.50	5.0	0.0	108.0	79	125	5.2	3.5	20.0	
cis-1,3-Dichloropropene	4.9	0.50	5.0	0.0	98.0	75	124	4.9	1.0	20.0	
trans-1,3-Dichloropropene	5.6	0.50	5.0	0.0	111.0	73	127	5.5	1.4	20.0	
Ethylbenzene	5.3	0.50	5.0	0.0	107.0	79	121	5.3	1.8	20.0	
Methyl tert-butyl ether (MTBE)	5.3	0.50	5.0	0.0	106.0	71	124	5.0	5.8	20.0	
Methyl ethyl ketone	63	10	50	0.0	126.0	56	143	63	0.4	20.0	
Methylene chloride	5.6	0.50	5.0	0.0	113.0	74	124	5.6	1.1	20.0	
Styrene	5.2	0.50	5.0	0.0	104.0	78	123	5.1	1.2	20.0	
1,1,1,2-Tetrachloroethane	5.4	0.50	5.0	0.0	108.0	78	124	5.3	1.2	20.0	
1,1,2,2-Tetrachloroethane	5.8	0.50	5.0	0.0	116.0	71	121	5.6	2.6	20.0	
Tetrachloroethene	5.4	0.50	5.0	0.0	108.0	74	129	5.2	4.3	20.0	
Toluene	5.6	0.50	5.0	0.0	112.0	80	121	5.6	0.7	20.0	
1,1,1-Trichloroethane	5.4	0.50	5.0	0.0	108.0	74	131	5.2	3.0	20.0	
1,1,2-Trichloroethane	5.7	0.50	5.0	0.0	114.0	80	119	5.3	6.9	20.0	
Trichloroethene	5.4	0.50	5.0	0.0	108.0	79	123	5.4	0.5	20.0	
Trichlorofluoromethane	5.4	0.50	5.0	0.0	107.0	65	141	5.1	4.4	20.0	
1,2,3-Trichloropropane	5.3	0.50	5.0	0.0	106.0	73	125	5.3	0.8	20.0	
Vinyl chloride	5.2	0.50	5.0	0.0	104.0	58	137	5.1	1.8	20.0	
m+p-Xylenes	10	0.50	10	0.0	105.0	80	121	10	0.7	20.0	
o-Xylene	5.3	0.50	5.0	0.0	107.0	78	122	5.3	1.5	20.0	
Xylenes, Total	16	0.50	15	0.0	106.0	79	121	16	0.9	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	107.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	105.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114	0.0			
Surr: Toluene-d8	10	0.50	10	0.0	100.0	89	112	0.0			

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 4 **SampType:** Method Blank **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 11:48 **Prep Date:**
Lab ID: MBLK032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromochloromethane	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chlorodibromomethane	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
2-Chlorotoluene	ND	0.50									
Dibromomethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
4-Chlorotoluene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3-Dichloropropane	ND	0.50									
2,2-Dichloropropane	ND	0.50									

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 4 **SampType:** Method Blank **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 11:48 **Prep Date:**
Lab ID: MBLK032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		110.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		108.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	85	114				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 4 **SampType:** Method Blank **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 11:48 **Prep Date:**
Lab ID: MBLK032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.5	0.50	10		95.0	89	112				

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Run ID: Run Order: VOA5975C.I_220323A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:53 **Prep Date:**
Lab ID: LCS032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.4	0.50	5.0		107.0	79	120				
Bromobenzene	4.8	0.50	5.0		97.0	80	120				
Bromochloromethane	5.3	0.50	5.0		107.0	78	123				
Bromodichloromethane	5.0	0.50	5.0		99.0	79	125				
Bromoform	4.9	0.50	5.0		98.0	66	130				
Carbon tetrachloride	5.1	0.50	5.0		103.0	72	136				
Chlorobenzene	5.0	0.50	5.0		99.0	82	118				
Chlorodibromomethane	4.8	0.50	5.0		95.0	74	126				
Chloroethane	5.3	0.50	5.0		106.0	60	138				
Chloroform	5.2	0.50	5.0		104.0	79	124				
Chloromethane	4.9	0.50	5.0		99.0	50	139				
1,2-Dibromoethane	4.8	0.50	5.0		97.0	78	122				
2-Chlorotoluene	5.0	0.50	5.0		100.0	79	122				
Dibromomethane	4.9	0.50	5.0		98.0	79	123				
1,2-Dichlorobenzene	4.9	0.50	5.0		98.0	80	119				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:53 **Prep Date:**
Lab ID: LCS032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.2	0.50	5.0		104.0	78	122				
1,3-Dichlorobenzene	5.1	0.50	5.0		102.0	80	119				
1,4-Dichlorobenzene	4.9	0.50	5.0		98.0	79	118				
Dichlorodifluoromethane	4.6	0.50	5.0		91.0	32	152				
1,1-Dichloroethane	5.5	0.50	5.0		109.0	77	125				
1,2-Dichloroethane	5.2	0.50	5.0		105.0	73	128				
1,1-Dichloroethene	5.4	0.50	5.0		108.0	71	131				
cis-1,2-Dichloroethene	5.3	0.50	5.0		106.0	78	123				
trans-1,2-Dichloroethene	5.4	0.50	5.0		107.0	75	124				
1,2-Dichloropropane	4.8	0.50	5.0		97.0	78	122				
1,3-Dichloropropane	4.6	0.50	5.0		93.0	80	119				
2,2-Dichloropropane	5.3	0.50	5.0		106.0	60	139				
1,1-Dichloropropene	5.1	0.50	5.0		101.0	79	125				
cis-1,3-Dichloropropene	4.5	0.50	5.0		90.0	75	124				
trans-1,3-Dichloropropene	4.9	0.50	5.0		98.0	73	127				
Ethylbenzene	4.8	0.50	5.0		96.0	79	121				
Methyl tert-butyl ether (MTBE)	5.4	0.50	5.0		108.0	71	124				
Methyl ethyl ketone	58	10	50		116.0	56	143				
Methylene chloride	5.3	0.50	5.0		107.0	74	124				
Styrene	4.9	0.50	5.0		98.0	78	123				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		96.0	78	124				
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0		104.0	71	121				
Tetrachloroethene	4.6	0.50	5.0		92.0	74	129				
Toluene	5.1	0.50	5.0		102.0	80	121				
1,1,1-Trichloroethane	5.0	0.50	5.0		100.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0		100.0	80	119				
Trichloroethene	4.8	0.50	5.0		96.0	79	123				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:53 **Prep Date:**
Lab ID: LCS032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	5.5	0.50	5.0		109.0	65	141				
1,2,3-Trichloropropane	4.7	0.50	5.0		95.0	73	125				
Vinyl chloride	5.2	0.50	5.0		103.0	58	137				
m+p-Xylenes	9.6	0.50	10		96.0	80	121				
o-Xylene	4.9	0.50	5.0		97.0	78	122				
Xylenes, Total	14	0.50	15		96.0	79	121				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		105.0	80	119				
Surr: p-Bromofluorobenzene	10	0.50	10		104.0	85	114				
Surr: Toluene-d8	9.6	0.50	10		96.0	89	112				

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Run ID: Run Order: VOA5975C.I_220323A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:22 **Prep Date:**
Lab ID: B22031470-027EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.7	0.50	5.0	0.0	114.0	79	120				
Bromobenzene	5.0	0.50	5.0	0.0	99.0	80	120				
Bromochloromethane	5.5	0.50	5.0	0.0	109.0	78	123				
Bromodichloromethane	5.4	0.50	5.0	0.0	107.0	79	125				
Bromoform	5.3	0.50	5.0	0.0	106.0	66	130				
Carbon tetrachloride	5.4	0.50	5.0	0.0	107.0	72	136				
Chlorobenzene	5.1	0.50	5.0	0.0	102.0	82	118				
Chlorodibromomethane	5.1	0.50	5.0	0.0	102.0	74	126				
Chloroethane	5.4	0.50	5.0	0.0	108.0	60	138				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:22 **Prep Date:**
Lab ID: B22031470-027EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	5.4	0.50	5.0	0.0	108.0	79	124				
Chloromethane	5.1	0.50	5.0	0.0	102.0	50	139				
1,2-Dibromoethane	4.9	0.50	5.0	0.0	98.0	78	122				
2-Chlorotoluene	5.3	0.50	5.0	0.0	105.0	79	122				
Dibromomethane	5.1	0.50	5.0	0.0	101.0	79	123				
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119				
4-Chlorotoluene	5.5	0.50	5.0	0.0	109.0	78	122				
1,3-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119				
1,4-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	79	118				
Dichlorodifluoromethane	4.5	0.50	5.0	0.0	90.0	32	152				
1,1-Dichloroethane	5.8	0.50	5.0	0.0	117.0	77	125				
1,2-Dichloroethane	5.4	0.50	5.0	0.0	107.0	73	128				
1,1-Dichloroethene	5.8	0.50	5.0	0.0	117.0	71	131				
cis-1,2-Dichloroethene	5.4	0.50	5.0	0.0	108.0	78	123				
trans-1,2-Dichloroethene	5.5	0.50	5.0	0.0	109.0	75	124				
1,2-Dichloropropane	5.0	0.50	5.0	0.0	99.0	78	122				
1,3-Dichloropropane	4.9	0.50	5.0	0.0	97.0	80	119				
2,2-Dichloropropane	5.3	0.50	5.0	0.0	105.0	60	139				
1,1-Dichloropropene	5.4	0.50	5.0	0.0	108.0	79	125				
cis-1,3-Dichloropropene	4.4	0.50	5.0	0.0	88.0	75	124				
trans-1,3-Dichloropropene	5.1	0.50	5.0	0.0	102.0	73	127				
Ethylbenzene	5.0	0.50	5.0	0.0	100.0	79	121				
Methyl tert-butyl ether (MTBE)	5.1	0.50	5.0	0.0	101.0	71	124				
Methyl ethyl ketone	60	10	50	0.0	120.0	56	143				
Methylene chloride	5.5	0.50	5.0	0.0	110.0	74	124				
Styrene	5.1	0.50	5.0	0.0	102.0	78	123				
1,1,1,2-Tetrachloroethane	5.0	0.50	5.0	0.0	101.0	78	124				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:22 **Prep Date:**
Lab ID: B22031470-027EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0	0.0	108.0	71	121				
Tetrachloroethene	4.9	0.50	5.0	0.0	97.0	74	129				
Toluene	5.4	0.50	5.0	0.0	108.0	80	121				
1,1,1-Trichloroethane	5.4	0.50	5.0	0.0	108.0	74	131				
1,1,2-Trichloroethane	5.2	0.50	5.0	0.0	104.0	80	119				
Trichloroethene	5.0	0.50	5.0	0.0	101.0	79	123				
Trichlorofluoromethane	5.5	0.50	5.0	0.0	111.0	65	141				
1,2,3-Trichloropropane	4.7	0.50	5.0	0.0	95.0	73	125				
Vinyl chloride	5.2	0.50	5.0	0.0	104.0	58	137				
m+p-Xylenes	10	0.50	10	0.0	100.0	80	121				
o-Xylene	5.0	0.50	5.0	0.0	99.0	78	122				
Xylenes, Total	15	0.50	15	0.0	100.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	104.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114				
Surr: Toluene-d8	9.6	0.50	10	0.0	96.0	89	112				

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Run ID: Run Order: VOA5975C.I_220323A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:49 **Prep Date:**
Lab ID: B22031470-027EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.7	0.50	5.0	0.0	115.0	79	120	5.7	1.0	20.0	
Bromobenzene	5.1	0.50	5.0	0.0	103.0	80	120	5.0	3.7	20.0	
Bromochloromethane	5.8	0.50	5.0	0.0	116.0	78	123	5.5	5.6	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:49 **Prep Date:**
Lab ID: B22031470-027EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.4	0.50	5.0	0.0	108.0	79	125	5.4	1.0	20.0	
Bromoform	5.3	0.50	5.0	0.0	106.0	66	130	5.3	0.2	20.0	
Carbon tetrachloride	5.6	0.50	5.0	0.0	113.0	72	136	5.4	4.8	20.0	
Chlorobenzene	5.2	0.50	5.0	0.0	105.0	82	118	5.1	2.6	20.0	
Chlorodibromomethane	5.3	0.50	5.0	0.0	106.0	74	126	5.1	4.2	20.0	
Chloroethane	5.6	0.50	5.0	0.0	112.0	60	138	5.4	3.3	20.0	
Chloroform	5.7	0.50	5.0	0.0	113.0	79	124	5.4	4.7	20.0	
Chloromethane	5.1	0.50	5.0	0.0	102.0	50	139	5.1	0.6	20.0	
1,2-Dibromoethane	5.1	0.50	5.0	0.0	103.0	78	122	4.9	4.5	20.0	
2-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	79	122	5.3	2.9	20.0	
Dibromomethane	5.4	0.50	5.0	0.0	107.0	79	123	5.1	5.8	20.0	
1,2-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	80	119	5.1	2.7	20.0	
4-Chlorotoluene	5.6	0.50	5.0	0.0	112.0	78	122	5.5	2.8	20.0	
1,3-Dichlorobenzene	5.4	0.50	5.0	0.0	109.0	80	119	5.3	3.0	20.0	
1,4-Dichlorobenzene	5.3	0.50	5.0	0.0	105.0	79	118	5.1	3.0	20.0	
Dichlorodifluoromethane	4.7	0.50	5.0	0.0	95.0	32	152	4.5	4.8	20.0	
1,1-Dichloroethane	5.8	0.50	5.0	0.0	117.0	77	125	5.8	0.1	20.0	
1,2-Dichloroethane	5.7	0.50	5.0	0.0	113.0	73	128	5.4	5.2	20.0	
1,1-Dichloroethene	6.0	0.50	5.0	0.0	121.0	71	131	5.8	3.5	20.0	
cis-1,2-Dichloroethene	5.7	0.50	5.0	0.0	113.0	78	123	5.4	5.0	20.0	
trans-1,2-Dichloroethene	5.6	0.50	5.0	0.0	112.0	75	124	5.5	2.3	20.0	
1,2-Dichloropropane	5.2	0.50	5.0	0.0	104.0	78	122	5.0	4.5	20.0	
1,3-Dichloropropane	5.0	0.50	5.0	0.0	99.0	80	119	4.9	1.9	20.0	
2,2-Dichloropropane	5.4	0.50	5.0	0.0	108.0	60	139	5.3	2.3	20.0	
1,1-Dichloropropene	5.4	0.50	5.0	0.0	108.0	79	125	5.4	0.4	20.0	
cis-1,3-Dichloropropene	4.7	0.50	5.0	0.0	94.0	75	124	4.4	6.5	20.0	
trans-1,3-Dichloropropene	5.3	0.50	5.0	0.0	107.0	73	127	5.1	4.3	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 19:49 **Prep Date:**
Lab ID: B22031470-027EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	5.2	0.50	5.0	0.0	104.0	79	121	5.0	3.5	20.0	
Methyl tert-butyl ether (MTBE)	5.5	0.50	5.0	0.0	110.0	71	124	5.1	7.8	20.0	
Methyl ethyl ketone	62	10	50	0.0	125.0	56	143	60	4.2	20.0	
Methylene chloride	5.7	0.50	5.0	0.0	114.0	74	124	5.5	3.7	20.0	
Styrene	5.3	0.50	5.0	0.0	106.0	78	123	5.1	3.8	20.0	
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0	0.0	104.0	78	124	5.0	3.2	20.0	
1,1,2,2-Tetrachloroethane	5.5	0.50	5.0	0.0	111.0	71	121	5.4	2.2	20.0	
Tetrachloroethene	5.2	0.50	5.0	0.0	103.0	74	129	4.9	5.7	20.0	
Toluene	5.5	0.50	5.0	0.0	110.0	80	121	5.4	2.3	20.0	
1,1,1-Trichloroethane	5.5	0.50	5.0	0.0	110.0	74	131	5.4	1.9	20.0	
1,1,2-Trichloroethane	5.3	0.50	5.0	0.0	107.0	80	119	5.2	2.6	20.0	
Trichloroethene	5.2	0.50	5.0	0.0	105.0	79	123	5.0	3.8	20.0	
Trichlorofluoromethane	5.7	0.50	5.0	0.0	114.0	65	141	5.5	2.2	20.0	
1,2,3-Trichloropropane	5.3	0.50	5.0	0.0	105.0	73	125	4.7	10.0	20.0	
Vinyl chloride	5.4	0.50	5.0	0.0	109.0	58	137	5.2	4.4	20.0	
m+p-Xylenes	10	0.50	10	0.0	103.0	80	121	10	2.3	20.0	
o-Xylene	5.2	0.50	5.0	0.0	105.0	78	122	5.0	5.2	20.0	
Xylenes, Total	15	0.50	15	0.0	103.0	79	121	15	3.3	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	107.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	105.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	107.0	85	114	0.0			
Surr: Toluene-d8	9.8	0.50	10	0.0	98.0	89	112	0.0			

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 4 **SampType:** Method Blank **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 15:16 **Prep Date:**
Lab ID: MBLK032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	ND	0.50									
Bromobenzene	ND	0.50									
Bromochloromethane	ND	0.50									
Bromodichloromethane	ND	0.50									
Bromoform	ND	0.50									
Carbon tetrachloride	ND	0.50									
Chlorobenzene	ND	0.50									
Chlorodibromomethane	ND	0.50									
Chloroethane	ND	0.50									
Chloroform	ND	0.50									
Chloromethane	ND	0.50									
1,2-Dibromoethane	ND	0.50									
2-Chlorotoluene	ND	0.50									
Dibromomethane	ND	0.50									
1,2-Dichlorobenzene	ND	0.50									
4-Chlorotoluene	ND	0.50									
1,3-Dichlorobenzene	ND	0.50									
1,4-Dichlorobenzene	ND	0.50									
Dichlorodifluoromethane	ND	0.50									
1,1-Dichloroethane	ND	0.50									
1,2-Dichloroethane	ND	0.50									
1,1-Dichloroethene	ND	0.50									
cis-1,2-Dichloroethene	ND	0.50									
trans-1,2-Dichloroethene	ND	0.50									
1,2-Dichloropropane	ND	0.50									
1,3-Dichloropropane	ND	0.50									
2,2-Dichloropropane	ND	0.50									

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 4 **SampType:** Method Blank **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 15:16 **Prep Date:**
Lab ID: MBLK032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	0.50									
cis-1,3-Dichloropropene	ND	0.50									
trans-1,3-Dichloropropene	ND	0.50									
Ethylbenzene	ND	0.50									
Methyl tert-butyl ether (MTBE)	ND	0.50									
Methyl ethyl ketone	ND	10									
Methylene chloride	ND	0.50									
Styrene	ND	0.50									
1,1,1,2-Tetrachloroethane	ND	0.50									
1,1,2,2-Tetrachloroethane	ND	0.50									
Tetrachloroethene	ND	0.50									
Toluene	ND	0.50									
1,1,1-Trichloroethane	ND	0.50									
1,1,2-Trichloroethane	ND	0.50									
Trichloroethene	ND	0.50									
Trichlorofluoromethane	ND	0.50									
1,2,3-Trichloropropane	ND	0.50									
Vinyl chloride	ND	0.50									
m+p-Xylenes	ND	0.50									
o-Xylene	ND	0.50									
Xylenes, Total	ND	0.50									
Surr: 1,2-Dichloroethane-d4	11	0.50	10		108.0	81	118				
Surr: Dibromofluoromethane	11	0.50	10		109.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	85	114				
Surr: Toluene-d8	9.6	0.50	10		96.0	89	112				

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 14:21 **Prep Date:**
Lab ID: LCS032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.1	0.50	5.0		102.0	79	120				
Bromobenzene	5.0	0.50	5.0		99.0	80	120				
Bromochloromethane	4.8	0.50	5.0		97.0	78	123				
Bromodichloromethane	5.1	0.50	5.0		102.0	79	125				
Bromoform	4.8	0.50	5.0		97.0	66	130				
Carbon tetrachloride	4.9	0.50	5.0		98.0	72	136				
Chlorobenzene	4.9	0.50	5.0		97.0	82	118				
Chlorodibromomethane	4.7	0.50	5.0		95.0	74	126				
Chloroethane	4.7	0.50	5.0		94.0	60	138				
Chloroform	4.9	0.50	5.0		97.0	79	124				
Chloromethane	4.4	0.50	5.0		87.0	50	139				
1,2-Dibromoethane	4.7	0.50	5.0		94.0	78	122				
2-Chlorotoluene	5.2	0.50	5.0		104.0	79	122				
Dibromomethane	4.9	0.50	5.0		98.0	79	123				
1,2-Dichlorobenzene	5.0	0.50	5.0		100.0	80	119				
4-Chlorotoluene	5.4	0.50	5.0		108.0	78	122				
1,3-Dichlorobenzene	5.2	0.50	5.0		103.0	80	119				
1,4-Dichlorobenzene	5.0	0.50	5.0		101.0	79	118				
Dichlorodifluoromethane	4.0	0.50	5.0		80.0	32	152				
1,1-Dichloroethane	5.1	0.50	5.0		103.0	77	125				
1,2-Dichloroethane	5.0	0.50	5.0		99.0	73	128				
1,1-Dichloroethene	5.3	0.50	5.0		105.0	71	131				
cis-1,2-Dichloroethene	5.0	0.50	5.0		101.0	78	123				
trans-1,2-Dichloroethene	5.0	0.50	5.0		100.0	75	124				
1,2-Dichloropropane	4.9	0.50	5.0		97.0	78	122				
1,3-Dichloropropane	4.7	0.50	5.0		95.0	80	119				
2,2-Dichloropropane	5.1	0.50	5.0		103.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 14:21 **Prep Date:**
Lab ID: LCS032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.9	0.50	5.0		98.0	79	125				
cis-1,3-Dichloropropene	4.4	0.50	5.0		88.0	75	124				
trans-1,3-Dichloropropene	5.1	0.50	5.0		101.0	73	127				
Ethylbenzene	4.9	0.50	5.0		97.0	79	121				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		92.0	71	124				
Methyl ethyl ketone	55	10	50		111.0	56	143				
Methylene chloride	5.0	0.50	5.0		101.0	74	124				
Styrene	4.9	0.50	5.0		98.0	78	123				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		96.0	78	124				
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0		102.0	71	121				
Tetrachloroethene	4.6	0.50	5.0		93.0	74	129				
Toluene	5.1	0.50	5.0		101.0	80	121				
1,1,1-Trichloroethane	4.8	0.50	5.0		97.0	74	131				
1,1,2-Trichloroethane	5.0	0.50	5.0		99.0	80	119				
Trichloroethene	4.9	0.50	5.0		99.0	79	123				
Trichlorofluoromethane	4.7	0.50	5.0		94.0	65	141				
1,2,3-Trichloropropane	4.8	0.50	5.0		95.0	73	125				
Vinyl chloride	4.6	0.50	5.0		92.0	58	137				
m+p-Xylenes	9.5	0.50	10		95.0	80	121				
o-Xylene	4.8	0.50	5.0		96.0	78	122				
Xylenes, Total	14	0.50	15		96.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10		104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10		100.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	85	114				
Surr: Toluene-d8	10	0.50	10		101.0	89	112				

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 22:32 **Prep Date:**
Lab ID: B22031699-001EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.9	0.50	5.0	0.0	98.0	79	120				
Bromobenzene	4.8	0.50	5.0	0.0	96.0	80	120				
Bromochloromethane	4.7	0.50	5.0	0.0	95.0	78	123				
Bromodichloromethane	5.0	0.50	5.0	0.0	99.0	79	125				
Bromoform	4.8	0.50	5.0	0.0	97.0	66	130				
Carbon tetrachloride	4.7	0.50	5.0	0.0	94.0	72	136				
Chlorobenzene	4.7	0.50	5.0	0.0	94.0	82	118				
Chlorodibromomethane	4.6	0.50	5.0	0.0	91.0	74	126				
Chloroethane	5.1	0.50	5.0	0.0	102.0	60	138				
Chloroform	4.7	0.50	5.0	0.0	94.0	79	124				
Chloromethane	4.8	0.50	5.0	0.0	96.0	50	139				
1,2-Dibromoethane	4.5	0.50	5.0	0.0	89.0	78	122				
2-Chlorotoluene	4.9	0.50	5.0	0.0	98.0	79	122				
Dibromomethane	4.8	0.50	5.0	0.0	96.0	79	123				
1,2-Dichlorobenzene	4.7	0.50	5.0	0.0	93.0	80	119				
4-Chlorotoluene	5.1	0.50	5.0	0.0	102.0	78	122				
1,3-Dichlorobenzene	4.8	0.50	5.0	0.0	96.0	80	119				
1,4-Dichlorobenzene	4.7	0.50	5.0	0.0	95.0	79	118				
Dichlorodifluoromethane	4.2	0.50	5.0	0.0	84.0	32	152				
1,1-Dichloroethane	5.0	0.50	5.0	0.0	99.0	77	125				
1,2-Dichloroethane	4.8	0.50	5.0	0.0	96.0	73	128				
1,1-Dichloroethene	5.1	0.50	5.0	0.0	102.0	71	131				
cis-1,2-Dichloroethene	4.7	0.50	5.0	0.0	94.0	78	123				
trans-1,2-Dichloroethene	4.7	0.50	5.0	0.0	93.0	75	124				
1,2-Dichloropropane	4.6	0.50	5.0	0.0	93.0	78	122				
1,3-Dichloropropane	4.5	0.50	5.0	0.0	90.0	80	119				
2,2-Dichloropropane	4.4	0.50	5.0	0.0	88.0	60	139				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 21 **SampType:** Sample Matrix Spike **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 22:32 **Prep Date:**
Lab ID: B22031699-001EMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	4.6	0.50	5.0	0.0	93.0	79	125				
cis-1,3-Dichloropropene	4.2	0.50	5.0	0.0	83.0	75	124				
trans-1,3-Dichloropropene	4.6	0.50	5.0	0.0	91.0	73	127				
Ethylbenzene	4.6	0.50	5.0	0.0	92.0	79	121				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0	0.0	93.0	71	124				
Methyl ethyl ketone	53	10	50	0.0	106.0	56	143				
Methylene chloride	4.8	0.50	5.0	0.0	97.0	74	124				
Styrene	4.6	0.50	5.0	0.0	92.0	78	123				
1,1,1,2-Tetrachloroethane	4.5	0.50	5.0	0.0	91.0	78	124				
1,1,2,2-Tetrachloroethane	5.0	0.50	5.0	0.0	100.0	71	121				
Tetrachloroethene	4.5	0.50	5.0	0.0	89.0	74	129				
Toluene	4.9	0.50	5.0	0.0	98.0	80	121				
1,1,1-Trichloroethane	4.6	0.50	5.0	0.0	92.0	74	131				
1,1,2-Trichloroethane	4.8	0.50	5.0	0.0	96.0	80	119				
Trichloroethene	4.6	0.50	5.0	0.0	93.0	79	123				
Trichlorofluoromethane	5.2	0.50	5.0	0.0	104.0	65	141				
1,2,3-Trichloropropane	4.4	0.50	5.0	0.0	89.0	73	125				
Vinyl chloride	4.9	0.50	5.0	0.0	98.0	58	137				
m+p-Xylenes	9.1	0.50	10	0.0	91.0	80	121				
o-Xylene	4.6	0.50	5.0	0.0	92.0	78	122				
Xylenes, Total	14	0.50	15	0.0	91.0	79	121				
Surr: 1,2-Dichloroethane-d4	10	0.50	10	0.0	104.0	81	118				
Surr: Dibromofluoromethane	10	0.50	10	0.0	102.0	80	119				
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	108.0	85	114				
Surr: Toluene-d8	10	0.50	10	0.0	100.0	89	112				

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 23:00 **Prep Date:**
Lab ID: B22031699-001EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0	0.0	105.0	79	120	4.9	7.0	20.0	
Bromobenzene	5.0	0.50	5.0	0.0	101.0	80	120	4.8	4.4	20.0	
Bromochloromethane	5.1	0.50	5.0	0.0	103.0	78	123	4.7	7.9	20.0	
Bromodichloromethane	5.2	0.50	5.0	0.0	104.0	79	125	5.0	5.2	20.0	
Bromoform	5.1	0.50	5.0	0.0	102.0	66	130	4.8	5.9	20.0	
Carbon tetrachloride	5.0	0.50	5.0	0.0	101.0	72	136	4.7	7.1	20.0	
Chlorobenzene	4.9	0.50	5.0	0.0	99.0	82	118	4.7	5.0	20.0	
Chlorodibromomethane	4.8	0.50	5.0	0.0	97.0	74	126	4.6	6.0	20.0	
Chloroethane	5.1	0.50	5.0	0.0	103.0	60	138	5.1	0.7	20.0	
Chloroform	5.0	0.50	5.0	0.0	100.0	79	124	4.7	6.2	20.0	
Chloromethane	4.9	0.50	5.0	0.0	98.0	50	139	4.8	2.6	20.0	
1,2-Dibromoethane	4.9	0.50	5.0	0.0	98.0	78	122	4.5	9.1	20.0	
2-Chlorotoluene	5.3	0.50	5.0	0.0	105.0	79	122	4.9	6.9	20.0	
Dibromomethane	5.1	0.50	5.0	0.0	102.0	79	123	4.8	6.3	20.0	
1,2-Dichlorobenzene	5.1	0.50	5.0	0.0	102.0	80	119	4.7	9.2	20.0	
4-Chlorotoluene	5.4	0.50	5.0	0.0	108.0	78	122	5.1	5.7	20.0	
1,3-Dichlorobenzene	5.2	0.50	5.0	0.0	104.0	80	119	4.8	7.7	20.0	
1,4-Dichlorobenzene	5.0	0.50	5.0	0.0	101.0	79	118	4.7	5.9	20.0	
Dichlorodifluoromethane	4.3	0.50	5.0	0.0	86.0	32	152	4.2	3.2	20.0	
1,1-Dichloroethane	5.3	0.50	5.0	0.0	107.0	77	125	5.0	7.1	20.0	
1,2-Dichloroethane	5.1	0.50	5.0	0.0	101.0	73	128	4.8	5.7	20.0	
1,1-Dichloroethene	5.4	0.50	5.0	0.0	107.0	71	131	5.1	5.0	20.0	
cis-1,2-Dichloroethene	5.1	0.50	5.0	0.0	103.0	78	123	4.7	8.9	20.0	
trans-1,2-Dichloroethene	5.2	0.50	5.0	0.0	104.0	75	124	4.7	11.0	20.0	
1,2-Dichloropropane	4.9	0.50	5.0	0.0	99.0	78	122	4.6	6.3	20.0	
1,3-Dichloropropane	4.8	0.50	5.0	0.0	97.0	80	119	4.5	7.8	20.0	
2,2-Dichloropropane	4.7	0.50	5.0	0.0	95.0	60	139	4.4	7.5	20.0	

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 22 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 23:00 **Prep Date:**
Lab ID: B22031699-001EMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.0	0.50	5.0	0.0	100.0	79	125	4.6	7.7	20.0	
cis-1,3-Dichloropropene	4.4	0.50	5.0	0.0	89.0	75	124	4.2	6.3	20.0	
trans-1,3-Dichloropropene	5.0	0.50	5.0	0.0	101.0	73	127	4.6	10.0	20.0	
Ethylbenzene	4.9	0.50	5.0	0.0	98.0	79	121	4.6	6.4	20.0	
Methyl tert-butyl ether (MTBE)	5.1	0.50	5.0	0.0	101.0	71	124	4.6	8.8	20.0	
Methyl ethyl ketone	59	10	50	0.0	118.0	56	143	53	11.0	20.0	
Methylene chloride	5.2	0.50	5.0	0.0	104.0	74	124	4.8	6.9	20.0	
Styrene	4.9	0.50	5.0	0.0	98.0	78	123	4.6	5.9	20.0	
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0	0.0	98.0	78	124	4.5	7.9	20.0	
1,1,2,2-Tetrachloroethane	5.3	0.50	5.0	0.0	107.0	71	121	5.0	6.3	20.0	
Tetrachloroethene	4.8	0.50	5.0	0.0	95.0	74	129	4.5	6.6	20.0	
Toluene	5.2	0.50	5.0	0.0	104.0	80	121	4.9	5.7	20.0	
1,1,1-Trichloroethane	5.0	0.50	5.0	0.0	100.0	74	131	4.6	8.4	20.0	
1,1,2-Trichloroethane	5.1	0.50	5.0	0.0	101.0	80	119	4.8	5.4	20.0	
Trichloroethene	4.9	0.50	5.0	0.0	98.0	79	123	4.6	5.6	20.0	
Trichlorofluoromethane	5.2	0.50	5.0	0.0	105.0	65	141	5.2	0.6	20.0	
1,2,3-Trichloropropane	5.1	0.50	5.0	0.0	102.0	73	125	4.4	14.0	20.0	
Vinyl chloride	4.9	0.50	5.0	0.0	97.0	58	137	4.9	0.5	20.0	
m+p-Xylenes	9.8	0.50	10	0.0	98.0	80	121	9.1	7.5	20.0	
o-Xylene	4.9	0.50	5.0	0.0	98.0	78	122	4.6	5.8	20.0	
Xylenes, Total	15	0.50	15	0.0	98.0	79	121	14	6.9	20.0	
Surr: 1,2-Dichloroethane-d4	11	0.50	10	0.0	108.0	81	118	0.0			
Surr: Dibromofluoromethane	10	0.50	10	0.0	103.0	80	119	0.0			
Surr: p-Bromofluorobenzene	11	0.50	10	0.0	108.0	85	114	0.0			
Surr: Toluene-d8	10	0.50	10	0.0	100.0	89	112	0.0			

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 10:50 **Prep Date:**
Lab ID: CCV032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.5	0.50	5.0		111.0	80	120				
Bromobenzene	5.4	0.50	5.0		108.0	80	120				
Bromochloromethane	5.3	0.50	5.0		107.0	80	120				
Bromodichloromethane	5.4	0.50	5.0		108.0	80	120				
Bromoform	5.3	0.50	5.0		107.0	80	120				
Carbon tetrachloride	5.2	0.50	5.0		105.0	80	120				
Chlorobenzene	5.2	0.50	5.0		105.0	80	120				
Chlorodibromomethane	5.3	0.50	5.0		106.0	80	120				
Chloroethane	6.0	0.50	5.0		120.0	80	120				
Chloroform	5.4	0.50	5.0		108.0	80	120				
Chloromethane	5.9	0.50	5.0		119.0	80	120				
1,2-Dibromoethane	5.3	0.50	5.0		105.0	80	120				
2-Chlorotoluene	5.5	0.50	5.0		111.0	80	120				
Dibromomethane	5.3	0.50	5.0		106.0	80	120				
1,2-Dichlorobenzene	5.3	0.50	5.0		105.0	80	120				
4-Chlorotoluene	5.6	0.50	5.0		112.0	80	120				
1,3-Dichlorobenzene	5.3	0.50	5.0		107.0	80	120				
1,4-Dichlorobenzene	5.2	0.50	5.0		104.0	80	120				
Dichlorodifluoromethane	6.4	0.50	5.0		127.0	80	120				S
1,1-Dichloroethane	5.6	0.50	5.0		113.0	80	120				
1,2-Dichloroethane	5.6	0.50	5.0		112.0	80	120				
1,1-Dichloroethene	5.5	0.50	5.0		109.0	80	120				
cis-1,2-Dichloroethene	5.5	0.50	5.0		110.0	80	120				
trans-1,2-Dichloroethene	5.2	0.50	5.0		103.0	80	120				
1,2-Dichloropropane	5.5	0.50	5.0		110.0	80	120				
1,3-Dichloropropane	5.3	0.50	5.0		106.0	80	120				
2,2-Dichloropropane	5.6	0.50	5.0		111.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 10:50 **Prep Date:**
Lab ID: CCV032122_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.3	0.50	5.0		106.0	80	120				
cis-1,3-Dichloropropene	5.2	0.50	5.0		104.0	80	120				
trans-1,3-Dichloropropene	5.5	0.50	5.0		110.0	80	120				
Ethylbenzene	5.1	0.50	5.0		102.0	80	120				
Methyl tert-butyl ether (MTBE)	5.4	0.50	5.0		109.0	80	120				
Methyl ethyl ketone	48	10	50		96.0	80	120				
Methylene chloride	5.5	0.50	5.0		110.0	80	120				
Styrene	5.2	0.50	5.0		105.0	80	120				
1,1,1,2-Tetrachloroethane	5.2	0.50	5.0		103.0	80	120				
1,1,2,2-Tetrachloroethane	5.6	0.50	5.0		112.0	80	120				
Tetrachloroethene	4.9	0.50	5.0		99.0	80	120				
Toluene	5.5	0.50	5.0		110.0	80	120				
1,1,1-Trichloroethane	5.3	0.50	5.0		107.0	80	120				
1,1,2-Trichloroethane	5.4	0.50	5.0		108.0	80	120				
Trichloroethene	5.4	0.50	5.0		108.0	80	120				
Trichlorofluoromethane	5.9	0.50	5.0		119.0	80	120				
1,2,3-Trichloropropane	5.6	0.50	5.0		112.0	80	120				
Vinyl chloride	5.7	0.50	5.0		115.0	80	120				
m+p-Xylenes	10	0.50	10		103.0	80	120				
o-Xylene	5.2	0.50	5.0		104.0	80	120				
Xylenes, Total	15	0.50	15		103.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		108.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		103.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	80	120				
Surr: Toluene-d8	9.9	0.50	10		99.0	80	120				

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 21:28 **Prep Date:**
Lab ID: CCV032122_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.4	0.50	5.0		107.0	50	150				
Bromobenzene	5.2	0.50	5.0		105.0	50	150				
Bromochloromethane	5.4	0.50	5.0		107.0	50	150				
Bromodichloromethane	5.3	0.50	5.0		107.0	50	150				
Bromoform	5.0	0.50	5.0		101.0	50	150				
Carbon tetrachloride	5.2	0.50	5.0		103.0	50	150				
Chlorobenzene	5.1	0.50	5.0		102.0	50	150				
Chlorodibromomethane	5.1	0.50	5.0		102.0	50	150				
Chloroethane	5.7	0.50	5.0		114.0	50	150				
Chloroform	5.3	0.50	5.0		105.0	50	150				
Chloromethane	5.7	0.50	5.0		114.0	50	150				
1,2-Dibromoethane	5.2	0.50	5.0		104.0	50	150				
2-Chlorotoluene	5.2	0.50	5.0		104.0	50	150				
Dibromomethane	5.2	0.50	5.0		103.0	50	150				
1,2-Dichlorobenzene	5.0	0.50	5.0		101.0	50	150				
4-Chlorotoluene	5.4	0.50	5.0		108.0	50	150				
1,3-Dichlorobenzene	5.1	0.50	5.0		103.0	50	150				
1,4-Dichlorobenzene	5.1	0.50	5.0		102.0	50	150				
Dichlorodifluoromethane	5.9	0.50	5.0		119.0	50	150				
1,1-Dichloroethane	5.3	0.50	5.0		107.0	50	150				
1,2-Dichloroethane	5.5	0.50	5.0		109.0	50	150				
1,1-Dichloroethene	5.3	0.50	5.0		106.0	50	150				
cis-1,2-Dichloroethene	5.0	0.50	5.0		100.0	50	150				
trans-1,2-Dichloroethene	5.1	0.50	5.0		103.0	50	150				
1,2-Dichloropropane	5.4	0.50	5.0		107.0	50	150				
1,3-Dichloropropane	5.3	0.50	5.0		106.0	50	150				
2,2-Dichloropropane	4.9	0.50	5.0		97.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220321A: 24 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376614
Method: SW8260B **Analysis Date:** 03/21/2022 21:28 **Prep Date:**
Lab ID: CCV032122_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.2	0.50	5.0		104.0	50	150				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	50	150				
trans-1,3-Dichloropropene	5.3	0.50	5.0		106.0	50	150				
Ethylbenzene	5.1	0.50	5.0		102.0	50	150				
Methyl tert-butyl ether (MTBE)	5.4	0.50	5.0		107.0	50	150				
Methyl ethyl ketone	44	10	50		88.0	50	150				
Methylene chloride	5.3	0.50	5.0		106.0	50	150				
Styrene	5.2	0.50	5.0		104.0	50	150				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		103.0	50	150				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		107.0	50	150				
Tetrachloroethene	5.0	0.50	5.0		101.0	50	150				
Toluene	5.4	0.50	5.0		107.0	50	150				
1,1,1-Trichloroethane	5.1	0.50	5.0		103.0	50	150				
1,1,2-Trichloroethane	5.4	0.50	5.0		107.0	50	150				
Trichloroethene	5.2	0.50	5.0		104.0	50	150				
Trichlorofluoromethane	5.6	0.50	5.0		112.0	50	150				
1,2,3-Trichloropropane	5.1	0.50	5.0		103.0	50	150				
Vinyl chloride	5.5	0.50	5.0		111.0	50	150				
m+p-Xylenes	10	0.50	10		103.0	50	150				
o-Xylene	5.2	0.50	5.0		103.0	50	150				
Xylenes, Total	15	0.50	15		103.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		106.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		105.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	50	150				
Surr: Toluene-d8	9.8	0.50	10		98.0	50	150				

Associated Samples: **B22031470-001E, B22031470-002A, B22031470-006E, B22031470-007A, B22031470-011E, B22031470-012A, B22031470-016E, B22031470-017B, B22031470-018A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:18 **Prep Date:**
Lab ID: CCV032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.4	0.50	5.0		107.0	80	120				
Bromobenzene	4.9	0.50	5.0		99.0	80	120				
Bromochloromethane	5.4	0.50	5.0		107.0	80	120				
Bromodichloromethane	5.1	0.50	5.0		101.0	80	120				
Bromoform	4.8	0.50	5.0		95.0	80	120				
Carbon tetrachloride	4.8	0.50	5.0		96.0	80	120				
Chlorobenzene	4.9	0.50	5.0		98.0	80	120				
Chlorodibromomethane	4.9	0.50	5.0		98.0	80	120				
Chloroethane	5.8	0.50	5.0		115.0	80	120				
Chloroform	5.1	0.50	5.0		103.0	80	120				
Chloromethane	5.8	0.50	5.0		115.0	80	120				
1,2-Dibromoethane	4.9	0.50	5.0		98.0	80	120				
2-Chlorotoluene	5.1	0.50	5.0		101.0	80	120				
Dibromomethane	5.0	0.50	5.0		100.0	80	120				
1,2-Dichlorobenzene	4.8	0.50	5.0		95.0	80	120				
4-Chlorotoluene	5.1	0.50	5.0		103.0	80	120				
1,3-Dichlorobenzene	5.0	0.50	5.0		99.0	80	120				
1,4-Dichlorobenzene	4.8	0.50	5.0		96.0	80	120				
Dichlorodifluoromethane	6.2	0.50	5.0		123.0	80	120				S
1,1-Dichloroethane	5.1	0.50	5.0		103.0	80	120				
1,2-Dichloroethane	5.2	0.50	5.0		105.0	80	120				
1,1-Dichloroethene	5.2	0.50	5.0		104.0	80	120				
cis-1,2-Dichloroethene	5.1	0.50	5.0		103.0	80	120				
trans-1,2-Dichloroethene	5.1	0.50	5.0		102.0	80	120				
1,2-Dichloropropane	5.0	0.50	5.0		100.0	80	120				
1,3-Dichloropropane	5.0	0.50	5.0		100.0	80	120				
2,2-Dichloropropane	5.2	0.50	5.0		104.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:18 **Prep Date:**
Lab ID: CCV032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1-Dichloropropene	5.1	0.50	5.0		102.0	80	120				
cis-1,3-Dichloropropene	4.9	0.50	5.0		98.0	80	120				
trans-1,3-Dichloropropene	5.0	0.50	5.0		100.0	80	120				
Ethylbenzene	4.8	0.50	5.0		96.0	80	120				
Methyl tert-butyl ether (MTBE)	5.4	0.50	5.0		108.0	80	120				
Methyl ethyl ketone	57	10	50		113.0	80	120				
Methylene chloride	5.2	0.50	5.0		104.0	80	120				
Styrene	4.9	0.50	5.0		97.0	80	120				
1,1,1,2-Tetrachloroethane	4.8	0.50	5.0		96.0	80	120				
1,1,2,2-Tetrachloroethane	5.1	0.50	5.0		102.0	80	120				
Tetrachloroethene	4.6	0.50	5.0		92.0	80	120				
Toluene	5.1	0.50	5.0		102.0	80	120				
1,1,1-Trichloroethane	5.0	0.50	5.0		100.0	80	120				
1,1,2-Trichloroethane	5.2	0.50	5.0		104.0	80	120				
Trichloroethene	5.0	0.50	5.0		99.0	80	120				
Trichlorofluoromethane	6.0	0.50	5.0		119.0	80	120				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	80	120				
Vinyl chloride	5.6	0.50	5.0		113.0	80	120				
m+p-Xylenes	9.6	0.50	10		96.0	80	120				
o-Xylene	4.8	0.50	5.0		97.0	80	120				
Xylenes, Total	14	0.50	15		96.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		108.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		104.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		106.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 10:18 **Prep Date:**
Lab ID: CCV032322_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Toluene-d8	9.7	0.50	10		97.0	80	120				

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Run ID: Run Order: VOA5975C.I_220323A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 20:44 **Prep Date:**
Lab ID: CCV032322_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.9	0.50	5.0		118.0	50	150				
Bromobenzene	5.1	0.50	5.0		102.0	50	150				
Bromochloromethane	5.7	0.50	5.0		114.0	50	150				
Bromodichloromethane	5.4	0.50	5.0		108.0	50	150				
Bromoform	5.2	0.50	5.0		103.0	50	150				
Carbon tetrachloride	5.6	0.50	5.0		111.0	50	150				
Chlorobenzene	5.2	0.50	5.0		104.0	50	150				
Chlorodibromomethane	5.2	0.50	5.0		104.0	50	150				
Chloroethane	6.2	0.50	5.0		123.0	50	150				
Chloroform	5.6	0.50	5.0		113.0	50	150				
Chloromethane	6.1	0.50	5.0		122.0	50	150				
1,2-Dibromoethane	5.1	0.50	5.0		103.0	50	150				
2-Chlorotoluene	5.2	0.50	5.0		105.0	50	150				
Dibromomethane	5.2	0.50	5.0		105.0	50	150				
1,2-Dichlorobenzene	5.1	0.50	5.0		101.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 20:44 **Prep Date:**
Lab ID: CCV032322_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
4-Chlorotoluene	5.4	0.50	5.0		108.0	50	150				
1,3-Dichlorobenzene	5.2	0.50	5.0		104.0	50	150				
1,4-Dichlorobenzene	5.1	0.50	5.0		101.0	50	150				
Dichlorodifluoromethane	6.2	0.50	5.0		125.0	50	150				
1,1-Dichloroethane	5.7	0.50	5.0		115.0	50	150				
1,2-Dichloroethane	5.9	0.50	5.0		118.0	50	150				
1,1-Dichloroethene	5.8	0.50	5.0		117.0	50	150				
cis-1,2-Dichloroethene	5.6	0.50	5.0		112.0	50	150				
trans-1,2-Dichloroethene	5.6	0.50	5.0		112.0	50	150				
1,2-Dichloropropane	5.2	0.50	5.0		105.0	50	150				
1,3-Dichloropropane	5.2	0.50	5.0		105.0	50	150				
2,2-Dichloropropane	5.5	0.50	5.0		110.0	50	150				
1,1-Dichloropropene	5.7	0.50	5.0		113.0	50	150				
cis-1,3-Dichloropropene	5.0	0.50	5.0		100.0	50	150				
trans-1,3-Dichloropropene	5.2	0.50	5.0		104.0	50	150				
Ethylbenzene	5.1	0.50	5.0		101.0	50	150				
Methyl tert-butyl ether (MTBE)	5.5	0.50	5.0		109.0	50	150				
Methyl ethyl ketone	67	10	50		134.0	50	150				
Methylene chloride	5.6	0.50	5.0		112.0	50	150				
Styrene	5.1	0.50	5.0		103.0	50	150				
1,1,1,2-Tetrachloroethane	5.1	0.50	5.0		102.0	50	150				
1,1,2,2-Tetrachloroethane	5.4	0.50	5.0		107.0	50	150				
Tetrachloroethene	5.0	0.50	5.0		101.0	50	150				
Toluene	5.4	0.50	5.0		109.0	50	150				
1,1,1-Trichloroethane	5.5	0.50	5.0		111.0	50	150				
1,1,2-Trichloroethane	5.3	0.50	5.0		106.0	50	150				
Trichloroethene	5.1	0.50	5.0		103.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220323A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377820
Method: SW8260B **Analysis Date:** 03/23/2022 20:44 **Prep Date:**
Lab ID: CCV032322_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Trichlorofluoromethane	6.3	0.50	5.0		126.0	50	150				
1,2,3-Trichloropropane	5.1	0.50	5.0		102.0	50	150				
Vinyl chloride	6.1	0.50	5.0		122.0	50	150				
m+p-Xylenes	10	0.50	10		103.0	50	150				
o-Xylene	5.1	0.50	5.0		102.0	50	150				
Xylenes, Total	15	0.50	15		103.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		105.0	50	150				
Surr: Dibromofluoromethane	11	0.50	10		106.0	50	150				
Surr: p-Bromofluorobenzene	10	0.50	10		104.0	50	150				
Surr: Toluene-d8	9.6	0.50	10		96.0	50	150				

Associated Samples: **B22031470-022E, B22031470-023A, B22031470-027E, B22031470-028A, B22031470-032E, B22031470-033A, B22031470-037E, B22031470-038B, B22031470-039A, B22031470-043E, B22031470-044A, B22031470-048E, B22031470-049A, B22031470-054A**

Run ID: Run Order: VOA5975C.I_220324A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 13:45 **Prep Date:**
Lab ID: CCV032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	4.9	0.50	5.0		97.0	80	120				
Bromobenzene	4.7	0.50	5.0		95.0	80	120				
Bromochloromethane	4.8	0.50	5.0		96.0	80	120				
Bromodichloromethane	4.7	0.50	5.0		94.0	80	120				
Bromoform	4.5	0.50	5.0		90.0	80	120				
Carbon tetrachloride	4.4	0.50	5.0		88.0	80	120				
Chlorobenzene	4.7	0.50	5.0		94.0	80	120				
Chlorodibromomethane	4.6	0.50	5.0		92.0	80	120				
Chloroethane	5.3	0.50	5.0		106.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 13:45 **Prep Date:**
Lab ID: CCV032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Chloroform	4.8	0.50	5.0		96.0	80	120				
Chloromethane	5.3	0.50	5.0		106.0	80	120				
1,2-Dibromoethane	4.6	0.50	5.0		92.0	80	120				
2-Chlorotoluene	4.7	0.50	5.0		94.0	80	120				
Dibromomethane	4.6	0.50	5.0		91.0	80	120				
1,2-Dichlorobenzene	4.7	0.50	5.0		94.0	80	120				
4-Chlorotoluene	5.0	0.50	5.0		99.0	80	120				
1,3-Dichlorobenzene	4.8	0.50	5.0		95.0	80	120				
1,4-Dichlorobenzene	4.6	0.50	5.0		93.0	80	120				
Dichlorodifluoromethane	5.5	0.50	5.0		109.0	80	120				
1,1-Dichloroethane	4.9	0.50	5.0		97.0	80	120				
1,2-Dichloroethane	4.9	0.50	5.0		97.0	80	120				
1,1-Dichloroethene	4.8	0.50	5.0		97.0	80	120				
cis-1,2-Dichloroethene	4.7	0.50	5.0		95.0	80	120				
trans-1,2-Dichloroethene	4.7	0.50	5.0		95.0	80	120				
1,2-Dichloropropane	4.7	0.50	5.0		94.0	80	120				
1,3-Dichloropropane	4.6	0.50	5.0		92.0	80	120				
2,2-Dichloropropane	4.8	0.50	5.0		96.0	80	120				
1,1-Dichloropropene	4.6	0.50	5.0		92.0	80	120				
cis-1,3-Dichloropropene	4.5	0.50	5.0		90.0	80	120				
trans-1,3-Dichloropropene	4.8	0.50	5.0		95.0	80	120				
Ethylbenzene	4.5	0.50	5.0		91.0	80	120				
Methyl tert-butyl ether (MTBE)	4.6	0.50	5.0		91.0	80	120				
Methyl ethyl ketone	52	10	50		103.0	80	120				
Methylene chloride	4.7	0.50	5.0		95.0	80	120				
Styrene	4.7	0.50	5.0		94.0	80	120				
1,1,1,2-Tetrachloroethane	4.6	0.50	5.0		91.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 13:45 **Prep Date:**
Lab ID: CCV032422_ **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	5.0	0.50	5.0		101.0	80	120				
Tetrachloroethene	4.4	0.50	5.0		88.0	80	120				
Toluene	4.9	0.50	5.0		98.0	80	120				
1,1,1-Trichloroethane	4.6	0.50	5.0		91.0	80	120				
1,1,2-Trichloroethane	4.7	0.50	5.0		95.0	80	120				
Trichloroethene	4.6	0.50	5.0		93.0	80	120				
Trichlorofluoromethane	5.4	0.50	5.0		107.0	80	120				
1,2,3-Trichloropropane	4.8	0.50	5.0		96.0	80	120				
Vinyl chloride	5.2	0.50	5.0		104.0	80	120				
m+p-Xylenes	9.2	0.50	10		92.0	80	120				
o-Xylene	4.7	0.50	5.0		93.0	80	120				
Xylenes, Total	14	0.50	15		92.0	80	120				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		107.0	80	120				
Surr: Dibromofluoromethane	10	0.50	10		104.0	80	120				
Surr: p-Bromofluorobenzene	11	0.50	10		107.0	80	120				
Surr: Toluene-d8	9.9	0.50	10		99.0	80	120				

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Run ID: Run Order: VOA5975C.I_220324A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 23:54 **Prep Date:**
Lab ID: CCV032422_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Benzene	5.2	0.50	5.0		104.0	50	150				
Bromobenzene	5.1	0.50	5.0		102.0	50	150				
Bromochloromethane	5.1	0.50	5.0		101.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 23:54 **Prep Date:**
Lab ID: CCV032422_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Bromodichloromethane	5.0	0.50	5.0		100.0	50	150				
Bromoform	4.8	0.50	5.0		95.0	50	150				
Carbon tetrachloride	4.9	0.50	5.0		98.0	50	150				
Chlorobenzene	5.0	0.50	5.0		99.0	50	150				
Chlorodibromomethane	4.7	0.50	5.0		94.0	50	150				
Chloroethane	5.5	0.50	5.0		109.0	50	150				
Chloroform	5.0	0.50	5.0		99.0	50	150				
Chloromethane	5.5	0.50	5.0		110.0	50	150				
1,2-Dibromoethane	4.7	0.50	5.0		94.0	50	150				
2-Chlorotoluene	5.2	0.50	5.0		104.0	50	150				
Dibromomethane	5.0	0.50	5.0		99.0	50	150				
1,2-Dichlorobenzene	4.9	0.50	5.0		97.0	50	150				
4-Chlorotoluene	5.4	0.50	5.0		107.0	50	150				
1,3-Dichlorobenzene	5.0	0.50	5.0		100.0	50	150				
1,4-Dichlorobenzene	4.9	0.50	5.0		99.0	50	150				
Dichlorodifluoromethane	5.6	0.50	5.0		112.0	50	150				
1,1-Dichloroethane	5.0	0.50	5.0		100.0	50	150				
1,2-Dichloroethane	5.0	0.50	5.0		100.0	50	150				
1,1-Dichloroethene	5.2	0.50	5.0		103.0	50	150				
cis-1,2-Dichloroethene	4.9	0.50	5.0		99.0	50	150				
trans-1,2-Dichloroethene	4.9	0.50	5.0		98.0	50	150				
1,2-Dichloropropane	5.0	0.50	5.0		100.0	50	150				
1,3-Dichloropropane	5.0	0.50	5.0		101.0	50	150				
2,2-Dichloropropane	4.6	0.50	5.0		92.0	50	150				
1,1-Dichloropropene	5.0	0.50	5.0		101.0	50	150				
cis-1,3-Dichloropropene	4.7	0.50	5.0		94.0	50	150				
trans-1,3-Dichloropropene	4.8	0.50	5.0		96.0	50	150				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VOA5975C.I_220324A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R377852
Method: SW8260B **Analysis Date:** 03/24/2022 23:54 **Prep Date:**
Lab ID: CCV032422_Closing **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Ethylbenzene	4.9	0.50	5.0		98.0	50	150				
Methyl tert-butyl ether (MTBE)	4.7	0.50	5.0		93.0	50	150				
Methyl ethyl ketone	57	10	50		113.0	50	150				
Methylene chloride	4.9	0.50	5.0		98.0	50	150				
Styrene	4.9	0.50	5.0		99.0	50	150				
1,1,1,2-Tetrachloroethane	4.9	0.50	5.0		98.0	50	150				
1,1,2,2-Tetrachloroethane	5.2	0.50	5.0		105.0	50	150				
Tetrachloroethene	4.7	0.50	5.0		95.0	50	150				
Toluene	5.3	0.50	5.0		105.0	50	150				
1,1,1-Trichloroethane	4.9	0.50	5.0		98.0	50	150				
1,1,2-Trichloroethane	5.0	0.50	5.0		99.0	50	150				
Trichloroethene	5.0	0.50	5.0		99.0	50	150				
Trichlorofluoromethane	5.6	0.50	5.0		113.0	50	150				
1,2,3-Trichloropropane	5.0	0.50	5.0		100.0	50	150				
Vinyl chloride	5.4	0.50	5.0		109.0	50	150				
m+p-Xylenes	9.9	0.50	10		99.0	50	150				
o-Xylene	4.9	0.50	5.0		99.0	50	150				
Xylenes, Total	15	0.50	15		99.0	50	150				
Surr: 1,2-Dichloroethane-d4	11	0.50	10		106.0	50	150				
Surr: Dibromofluoromethane	10	0.50	10		101.0	50	150				
Surr: p-Bromofluorobenzene	11	0.50	10		108.0	50	150				
Surr: Toluene-d8	10	0.50	10		101.0	50	150				

Associated Samples: **B22031470-053E, B22031470-058E, B22031470-059A, B22031470-063E, B22031470-064A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GECD.I_220321A: 2 **SampType:** Method Blank **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 14:26 **Prep Date:** 03/21/2022 09:13
Lab ID: MB-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	ND	0.0050									
Surr: 1,1,1,2-Tetrachloroethane	0.087	0.020	0.10		87.0	70	130				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 14:46 **Prep Date:** 03/21/2022 09:13
Lab ID: LCS-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.23	0.010	0.25		91.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.089	0.020	0.10		89.0	70	130				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 4 **SampType:** Laboratory Control Sample **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 15:06 **Prep Date:** 03/21/2022 09:15
Lab ID: LCS1-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.095	0.010	0.10		95.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.086	0.020	0.10		86.0	70	130				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GECD.I_220321A: 12 **SampType:** Sample Matrix Spike **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 18:03 **Prep Date:** 03/21/2022 09:16
Lab ID: B22031463-001GMS **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.22	0.010	0.24	0.0	89.0	60	140				
Surr: 1,1,1,2-Tetrachloroethane	0.086	0.020	0.097	0.0	89.0	70	130				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 13 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 18:23 **Prep Date:** 03/21/2022 09:16
Lab ID: B22031463-001GMSD **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.22	0.010	0.24	0.0	92.0	60	140	0.22	2.8	20.0	
Surr: 1,1,1,2-Tetrachloroethane	0.088	0.020	0.096	0.0	91.0	70	130	0.0			

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 19:03 **Prep Date:** 03/21/2022 09:15
Lab ID: CK5-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.38	0.010	0.40		96.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.40	0.020	0.40		100.0	80	120				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GECD.I_220321A: 25 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/21/2022 23:19 **Prep Date:** 03/21/2022 09:15
Lab ID: CK3-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.097	0.010	0.10		97.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	80	120				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 36 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/22/2022 03:35 **Prep Date:** 03/21/2022 09:15
Lab ID: CK5-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.38	0.010	0.40		95.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.41	0.020	0.40		101.0	80	120				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Run ID: Run Order: GECD.I_220321A: 43 **SampType:** Continuing Calibration Verification Standard **Batch ID:** 164679
Method: SW8011 **Analysis Date:** 03/22/2022 06:33 **Prep Date:** 03/21/2022 09:15
Lab ID: CK3-164679 **Units:** ug/L **Prep Method:** SW8011

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
1,2-Dibromoethane	0.097	0.010	0.10		97.0	80	120				
Surr: 1,1,1,2-Tetrachloroethane	0.091	0.020	0.10		91.0	80	120				

Associated Samples: **B22031470-001G, B22031470-004A, B22031470-006G, B22031470-009A, B22031470-011G, B22031470-014A, B22031470-016G, B22031470-020A, B22031470-022G, B22031470-025A, B22031470-027G, B22031470-030A, B22031470-032G, B22031470-035A, B22031470-037G, B22031470-041A, B22031470-043G, B22031470-046A, B22031470-048G, B22031470-051A, B22031470-053G, B22031470-056A, B22031470-058G, B22031470-061A, B22031470-063G, B22031470-066A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 5 **SampType:** Method Blank **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/22/2022 14:39 **Prep Date:** 03/21/2022 11:47
Lab ID: MB-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons	ND	0.15									
Surr: o-Terphenyl	0.19	0.0020	0.20		94.0	56	125				
Surr: n-Triacontane	0.090	0.0020	0.10		90.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220324A: 5 **SampType:** Method Blank **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 13:12 **Prep Date:** 03/21/2022 11:47
Lab ID: MB-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	ND	0.15									
Oil Range Hydrocarbons (SGT-C24 to C40)	ND	0.15									
Total Extractable Hydrocarbons (SGT)	ND	0.15									
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.20		85.0	56	125				
Surr: n-Triacontane (SGT)	0.076	0.0020	0.10		76.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/22/2022 13:14 **Prep Date:** 03/21/2022 11:47
Lab ID: LCS-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	15		82.0	36	132				
Total Extractable Hydrocarbons	13	0.30	15		87.0	60	132				
Surr: o-Terphenyl	0.18	0.0020	0.20		91.0	56	125				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/22/2022 13:57 **Prep Date:** 03/21/2022 11:47
Lab ID: LCSD-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	15		83.0	36	132	12	1.9	20.0	
Total Extractable Hydrocarbons	13	0.30	15		89.0	60	132	13	1.8	20.0	
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	56	125	0.0			

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 24 **SampType:** Laboratory Control Sample **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/23/2022 10:36 **Prep Date:** 03/21/2022 11:47
Lab ID: LCS-164697-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.6	0.30	5.0		93.0	41	113				
Surr: n-Triacontane	0.084	0.0020	0.10		84.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 25 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/23/2022 12:01 **Prep Date:** 03/21/2022 11:47
Lab ID: LCSD-164697-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		102.0	41	113	4.6	9.5	20.0	
Surr: n-Triacontane	0.088	0.0020	0.10		88.0	50	150	0.0			

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220324A: 3 **SampType:** Laboratory Control Sample **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 11:46 **Prep Date:** 03/21/2022 11:47
Lab ID: LCS-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		83.0	36	132				
Total Extractable Hydrocarbons (SGT)	13	0.30	15		88.0	60	132				
Surr: o-Terphenyl (SGT)	0.19	0.0020	0.20		97.0	56	125				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220324A: 4 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 12:29 **Prep Date:** 03/21/2022 11:47
Lab ID: LCSD-164697 **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	12	0.30	15		77.0	36	132	12	7.6	20.0	
Total Extractable Hydrocarbons (SGT)	12	0.30	15		82.0	60	132	13	7.6	20.0	
Surr: o-Terphenyl (SGT)	0.18	0.0020	0.20		92.0	56	125	0.0			

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220324A: 10 **SampType:** Laboratory Control Sample **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 16:46 **Prep Date:** 03/21/2022 11:47
Lab ID: LCS-164697-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	5.4	0.30	5.0		109.0	41	113				
Surr: n-Triacontane (SGT)	0.087	0.0020	0.10		87.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220324A: 11 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 18:12 **Prep Date:** 03/21/2022 11:47
Lab ID: LCSD-164697-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	5.1	0.30	5.0		102.0	41	113	5.4	5.8	20.0	
Surr: n-Triacontane (SGT)	0.083	0.0020	0.10		83.0	50	150	0.0			

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 21 **SampType:** Sample Matrix Spike **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/23/2022 05:38 **Prep Date:** 03/21/2022 11:48
Lab ID: B22031463-006CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	12	0.30	14	0.15	80.0	36	132				
Total Extractable Hydrocarbons	13	0.30	14	0.50	85.0	60	132				
Surr: o-Terphenyl	0.16	0.0020	0.19	0.0	86.0	56	125				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 26 **SampType:** Sample Matrix Spike **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/23/2022 12:44 **Prep Date:** 03/21/2022 11:48
Lab ID: B22031470-011CMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	4.8	0.30	4.8	0.19	98.0	41	113				
Surr: n-Triacontane	0.082	0.0020	0.095	0.0	86.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220324A: 8 **SampType:** Sample Matrix Spike **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 15:21 **Prep Date:** 03/21/2022 11:48
Lab ID: B22031463-006CMS **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (SGT-C10 to C24)	11	0.30	14	0.0	76.0	36	132				
Total Extractable Hydrocarbons (SGT)	12	0.30	14	0.0	81.0	60	132				
Surr: o-Terphenyl (SGT)	0.17	0.0020	0.19	0.0	88.0	56	125				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220324A: 9 **SampType:** Sample Matrix Spike **Batch ID:** 164697
Method: SW8015C **Analysis Date:** 03/24/2022 16:04 **Prep Date:** 03/21/2022 11:48
Lab ID: B22031470-011CMS-RRO **Units:** mg/L **Prep Method:** SW3520C

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH (SGT-Oil Range)	4.9	0.30	4.8	0.0	104.0	41	113				
Surr: n-Triacontane (SGT)	0.080	0.0020	0.095	0.0	84.0	50	150				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 4 **SampType:** Method Blank **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 12:02 **Prep Date:**
Lab ID: MBLK_0321VAR08r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		74.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 19 **SampType:** Method Blank **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 23:28 **Prep Date:**
Lab ID: MBLK_0321VAR28r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		74.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 30 **SampType:** Method Blank **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 10:20 **Prep Date:**
Lab ID: MBLK_0321VAR47r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		74.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 48 **SampType:** Method Blank **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/23/2022 08:38 **Prep Date:**
Lab ID: MBLK_0321VAR86r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	ND	10									
Total Purgeable Hydrocarbons	ND	10									
Surr: Trifluorotoluene	19	1.0	25		74.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 3 **SampType:** Laboratory Control Sample **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 10:54 **Prep Date:**
Lab ID: LCS_0321VAR06r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	157	20	170		92.0	78	122				
Total Purgeable Hydrocarbons	186	20	200		93.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		86.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 18 **SampType:** Laboratory Control Sample **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 22:19 **Prep Date:**
Lab ID: LCS_0321VAR26r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	152	20	170		89.0	78	122				
Total Purgeable Hydrocarbons	179	20	200		90.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		85.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 29 **SampType:** Laboratory Control Sample **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 09:11 **Prep Date:**
Lab ID: LCS_0321VAR45r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	151	20	170		89.0	78	122				
Total Purgeable Hydrocarbons	178	20	200		89.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		82.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 47 **SampType:** Laboratory Control Sample **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/23/2022 08:04 **Prep Date:**
Lab ID: LCS_0321VAR85r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	153	20	170		90.0	78	122				
Total Purgeable Hydrocarbons	181	20	200		90.0	70	130				
Surr: Trifluorotoluene	21	1.0	25		84.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 14 **SampType:** Sample Matrix Spike **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 19:28 **Prep Date:**
Lab ID: B22031463-006FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	148	20	170	0.0	87.0	78	122				
Total Purgeable Hydrocarbons	176	20	200	0.0	88.0	70	130				
Surr: Trifluorotoluene	21	1.0	25	0.0	82.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 15 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 20:02 **Prep Date:**
Lab ID: B22031463-006FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	150	20	170	0.0	89.0	78	122	148	1.4	20.0	
Total Purgeable Hydrocarbons	179	20	200	0.0	89.0	70	130	176	1.6	20.0	
Surr: Trifluorotoluene	21	1.0	25	0.0	83.0	70	130	0.0			

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 41 **SampType:** Sample Matrix Spike **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 17:11 **Prep Date:**
Lab ID: B22031470-032FMS **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	149	20	170	0.0	88.0	78	122				
Total Purgeable Hydrocarbons	176	20	200	0.0	88.0	70	130				
Surr: Trifluorotoluene	21	1.0	25	0.0	83.0	70	130				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 42 **SampType:** Sample Matrix Spike Duplicate **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 17:46 **Prep Date:**
Lab ID: B22031470-032FMSD **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	151	20	170	0.0	89.0	78	122	149	1.4	20.0	
Total Purgeable Hydrocarbons	178	20	200	0.0	89.0	70	130	176	1.2	20.0	
Surr: Trifluorotoluene	21	1.0	25	0.0	84.0	70	130	0.0			

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/22/2022 11:06 **Prep Date:**
Lab ID: CCV_0322HP505r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		95.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		99.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/22/2022 21:48 **Prep Date:**
Lab ID: CCV_0322HP520r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 14 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/22/2022 22:31 **Prep Date:**
Lab ID: CCV_0322HP521r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		100.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		104.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		102.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 22 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/23/2022 08:29 **Prep Date:**
Lab ID: CCV_0322HP535r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/23/2022 09:11 **Prep Date:**
Lab ID: CCV_0322HP536r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		96.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: GCFID-HP5-B_220322A: 32 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/23/2022 19:13 **Prep Date:**
Lab ID: CCV_0322HP550r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.2	0.30	5.0		103.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220322A: 33 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376664
Method: SW8015C **Analysis Date:** 03/23/2022 19:56 **Prep Date:**
Lab ID: CCV_0322HP551r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		96.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		98.0	80	120				

Associated Samples: **B22031470-001C, B22031470-006C, B22031470-011C, B22031470-016C, B22031470-017A, B22031470-022C, B22031470-027C, B22031470-032C, B22031470-037C, B22031470-038A, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C, B22031470-063C**

Run ID: Run Order: VARIAN1_220321A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 10:19 **Prep Date:**
Lab ID: CCV_0321VAR05r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	174	20	168		104.0	80	120				
Total Purgeable Hydrocarbons	210	20	200		105.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		89.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 17 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/21/2022 21:45 **Prep Date:**
Lab ID: CCV_0321VAR25r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	167	20	168		100.0	80	120				
Total Purgeable Hydrocarbons	200	20	200		100.0	80	120				
Surr: Trifluorotoluene	22	1.0	25		86.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 28 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 08:37 **Prep Date:**
Lab ID: CCV_0321VAR44r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	162	20	168		96.0	80	120				
Total Purgeable Hydrocarbons	195	20	200		98.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		84.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 44 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 19:29 **Prep Date:**
Lab ID: CCV_0321VAR63r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	172	20	168		102.0	80	120				
Total Purgeable Hydrocarbons	207	20	200		103.0	80	120				

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 44 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/22/2022 19:29 **Prep Date:**
Lab ID: CCV_0321VAR63r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Surr: Trifluorotoluene	22	1.0	25		86.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: VARIAN1_220321A: 46 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/23/2022 06:55 **Prep Date:**
Lab ID: CCV_0321VAR83r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	161	20	168		96.0	80	120				
Total Purgeable Hydrocarbons	194	20	200		97.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		84.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: VARIAN1_220321A: 58 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376668
Method: SW8015C **Analysis Date:** 03/23/2022 16:04 **Prep Date:**
Lab ID: CCV_0321VAR99r **Units:** ug/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
C6 to C10	175	20	168		104.0	80	120				
Total Purgeable Hydrocarbons	212	20	200		106.0	80	120				
Surr: Trifluorotoluene	21	1.0	25		85.0	80	120				

Associated Samples: **B22031470-001F, B22031470-003A, B22031470-006F, B22031470-008A, B22031470-011F, B22031470-013A, B22031470-016F, B22031470-017C, B22031470-019A, B22031470-022F, B22031470-024A, B22031470-027F, B22031470-029A, B22031470-032F, B22031470-034A, B22031470-037F, B22031470-038C, B22031470-040A, B22031470-043F, B22031470-045A, B22031470-048F, B22031470-050A, B22031470-053F, B22031470-055A, B22031470-058F, B22031470-060A, B22031470-063F, B22031470-065A**

Run ID: Run Order: GCFID-HP5-B_220324A: 2 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376755
Method: SW8015C **Analysis Date:** 03/24/2022 09:36 **Prep Date:**
Lab ID: CCV_0324HP505r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	14	0.30	15		96.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		99.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22031470-011C, B22031470-027C, B22031470-032C, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C**

Run ID: Run Order: GCFID-HP5-B_220324A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376755
Method: SW8015C **Analysis Date:** 03/24/2022 19:38 **Prep Date:**
Lab ID: CCV_0324HP519r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.1	0.30	5.0		102.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		96.0	80	120				

Associated Samples: **B22031470-011C, B22031470-027C, B22031470-032C, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: GCFID-HP5-B_220324A: 13 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376755
Method: SW8015C **Analysis Date:** 03/24/2022 20:20 **Prep Date:**
Lab ID: CCV_0324HP520r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		100.0	80	120				
Total Extractable Hydrocarbons	16	0.30	15		104.0	80	120				
Surr: o-Terphenyl	0.20	0.0020	0.20		101.0	80	120				

Associated Samples: **B22031470-011C, B22031470-027C, B22031470-032C, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C**

Run ID: Run Order: GCFID-HP5-B_220324A: 22 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376755
Method: SW8015C **Analysis Date:** 03/25/2022 06:23 **Prep Date:**
Lab ID: CCV_0324HP534r-W **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
TEH(Oil Range)	5.0	0.30	5.0		100.0	80	120				
Surr: n-Triacontane	0.19	0.0020	0.20		94.0	80	120				

Associated Samples: **B22031470-011C, B22031470-027C, B22031470-032C, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C**

Run ID: Run Order: GCFID-HP5-B_220324A: 23 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376755
Method: SW8015C **Analysis Date:** 03/25/2022 07:06 **Prep Date:**
Lab ID: CCV_0324HP535r **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Diesel Range Organics (C10 to C24)	15	0.30	15		97.0	80	120				
Total Extractable Hydrocarbons	15	0.30	15		100.0	80	120				
Surr: o-Terphenyl	0.19	0.0020	0.20		97.0	80	120				

Associated Samples: **B22031470-011C, B22031470-027C, B22031470-032C, B22031470-043C, B22031470-048C, B22031470-053C, B22031470-058C**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: FID-HEADSPACE_220321B: 4 **SampType:** Method Blank **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 14:10 **Prep Date:**
Lab ID: MBLK **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	ND	0.0010			0.0						

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Run ID: Run Order: FID-HEADSPACE_220321B: 2 **SampType:** Laboratory Control Sample **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 13:54 **Prep Date:**
Lab ID: LCS **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	96	2.0	100		96.0	85	115				

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Run ID: Run Order: FID-HEADSPACE_220321B: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 14:02 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	97	2.0	100		97.0	85	115	96	0.4	20.0	

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: FID-HEADSPACE_220321B: 22 **SampType:** Sample Duplicate **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 15:36 **Prep Date:**
Lab ID: B22031470-043HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	0.0032	0.0020			0.0			0.0032	0.8	20.0	

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Run ID: Run Order: FID-HEADSPACE_220322A: 4 **SampType:** Method Blank **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 09:31 **Prep Date:**
Lab ID: MBLK **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	ND	0.0010			0.0						

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Run ID: Run Order: FID-HEADSPACE_220322A: 2 **SampType:** Laboratory Control Sample **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 08:36 **Prep Date:**
Lab ID: LCS **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	97	2.0	100		97.0	85	115				

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: FID-HEADSPACE_220322A: 3 **SampType:** Laboratory Control Sample Duplicate **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 08:44 **Prep Date:**
Lab ID: LCSD **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	98	2.0	100		98.0	85	115	97	1.1	20.0	

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Run ID: Run Order: FID-HEADSPACE_220322A: 6 **SampType:** Sample Duplicate **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 09:41 **Prep Date:**
Lab ID: B22031470-053HDUP **Units:** mg/L **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	ND	0.0020			0.0			0.0015		20.0	

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Run ID: Run Order: FID-HEADSPACE_220321B: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 13:50 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		100.0	85	115				

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Analytical QC Summary Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Run ID: Run Order: FID-HEADSPACE_220321B: 26 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376543
Method: SW8015M **Analysis Date:** 03/21/2022 15:55 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	100	2.0	100		100.0	85	115				

Associated Samples: **B22031470-001H, B22031470-005A, B22031470-006H, B22031470-010A, B22031470-011H, B22031470-015A, B22031470-016H, B22031470-021A, B22031470-022H, B22031470-026A, B22031470-027H, B22031470-031A, B22031470-032H, B22031470-036A, B22031470-037H, B22031470-042A, B22031470-043H, B22031470-047A, B22031470-048H, B22031470-052A**

Run ID: Run Order: FID-HEADSPACE_220322A: 1 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 08:30 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	99	2.0	100		99.0	85	115				

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Run ID: Run Order: FID-HEADSPACE_220322A: 12 **SampType:** Continuing Calibration Verification Standard **Batch ID:** R376545
Method: SW8015M **Analysis Date:** 03/22/2022 10:10 **Prep Date:**
Lab ID: CCV **Units:** ppm **Prep Method:**

Analytes	Result	LOQ	Spk value	Spk RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Methane	99	2.0	100		99.0	85	115				

Associated Samples: **B22031470-053H, B22031470-057A, B22031470-058H, B22031470-062A, B22031470-063H, B22031470-067A**

Analytical QC Exceptions Report

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470
Project: CV18F0126, 60571032.02.46.01

Revised Date: 03/31/2022
Report Date: 03/28/2022

Analysis Method	Analysis	Batch ID	Associated Samples	Sample Type	Lab ID	Analysis Date	Analysis Time	Analyte	%REC	Low Limit	High Limit	% RPD	RPD Limit	Qual
SW8260B	8260-Volatile Organic Compounds QC Samples	R376614	001E, 002A, 006E, 007A, 011E, 012A, 016E, 017B, 018A	CCV	CCV032122_	3/21/2022	10:50	Dichlorodifluoromethane	127.0	80	120			S
		R377820	022E, 023A, 027E, 028A, 032E, 033A, 037E, 038B, 039A, 043E, 044A, 048E, 049A, 054A	CCV	CCV032322_	3/23/2022	10:18	Dichlorodifluoromethane	123.0	80	120			S

Preparation and Analysis Dates Report

Work Order: B22031470
Client: AECOM - Honolulu
Project Name: CV18F0126, 60571032.02.46.01

Date Revised: 3/31/2022
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Lab ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Method	Prep Date	Prep Batch	Analysis Method	Analysis Date
001B	ERH2833 (RHMW06)	03/16/2022 16:30	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/22/2022 22:11
001C	ERH2833 (RHMW06)	03/16/2022 16:30	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 02:05
001G	ERH2833 (RHMW06)	03/16/2022 16:30	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 19:42
004A	ERH2832 (Trip Blank)-14525	03/16/2022 16:30	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 20:02
006B	ERH2793 (OWDFMW01)	03/15/2022 17:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/22/2022 22:24
006C	ERH2793 (OWDFMW01)	03/15/2022 17:45	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 15:24
006G	ERH2793 (OWDFMW01)	03/15/2022 17:45	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 20:22
009A	ERH2792 (Trip Blank)-14894	03/15/2022 17:45	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 20:41
011B	ERH2826 (RHMW08)	03/16/2022 14:45	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/22/2022 22:49
011C	ERH2826 (RHMW08)	03/16/2022 14:45	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 15:39
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/24/2022 13:55
011G	ERH2826 (RHMW08)	03/16/2022 14:45	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 21:01
014A	ERH2825 (Trip Blank)-14694	03/16/2022 14:45	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 21:21
016B	ERH2783 (OWDFMW04A)	03/16/2022 16:15	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/22/2022 23:01
016C	ERH2783 (OWDFMW04A)	03/16/2022 16:15	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 16:06
016G	ERH2783 (OWDFMW04A)	03/16/2022 16:15	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 21:41
017A	ERH2784 (OWDFMW04A FD)	03/16/2022 16:15	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 16:49
020A	ERH2782 (Trip Blank)-14894	03/16/2022 16:15	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 22:00
022B	ERH2836 (RHMW13-05)	03/16/2022 13:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 01:27
022C	ERH2836 (RHMW13-05)	03/16/2022 13:20	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 01:22
022G	ERH2836 (RHMW13-05)	03/16/2022 13:20	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 22:20
025A	ERH2835 (Trip Blank)-14833	03/16/2022 13:20	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 22:40
027B	ERH2823 (OWDFMW07A)	03/16/2022 14:21	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 01:39

Preparation and Analysis Dates Report

Work Order: B22031470
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027C	ERH2823 (OWDFMW07A)	03/16/2022 14:21	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 18:14
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/24/2022 22:29
027G	ERH2823 (OWDFMW07A)	03/16/2022 14:21	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/21/2022 23:59
030A	ERH2822 (Trip Blank)-14733	03/16/2022 14:21	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 00:18
032B	ERH2841 (RHMW09)	03/16/2022 12:25	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 01:52
032C	ERH2841 (RHMW09)	03/16/2022 12:25	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 03:30
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/25/2022 01:22
032G	ERH2841 (RHMW09)	03/16/2022 12:25	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 00:38
035A	ERH2840 (Trip Blank)-14894	03/16/2022 12:20	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 00:58
037B	ERH2788 (OWDFMW08A)	03/17/2022 16:25	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 02:04
037C	ERH2788 (OWDFMW08A)	03/17/2022 16:25	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 18:56
037G	ERH2788 (OWDFMW08A)	03/17/2022 16:25	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 01:18
038A	ERH2789 (OWDFMW08A FD)	03/17/2022 16:25	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 19:39
041A	ERH2787 (Trip Blank)-14733	03/17/2022 16:25	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 01:37
043B	ERH2830 (OWDFMW05A)	03/17/2022 13:20	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 02:54
043C	ERH2830 (OWDFMW05A)	03/17/2022 13:20	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/22/2022 20:22
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/24/2022 23:13
043G	ERH2830 (OWDFMW05A)	03/17/2022 13:20	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 01:57
046A	ERH2829 (Trip Blank)-14694	03/17/2022 13:20	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 02:16
048B	ERH2844 (RHMW2254-01 B)	03/17/2022 13:00	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 03:38
048C	ERH2844 (RHMW2254-01 B)	03/17/2022 13:00	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 16:22
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/25/2022 03:31
048G	ERH2844 (RHMW2254-01 B)	03/17/2022 13:00	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 02:36
051A	ERH2843 (Trip Blank)-14733	03/17/2022 13:00	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 02:56
053B	ERH2850 (Sump Adit 3)	03/17/2022 15:05	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 04:02
053C	ERH2850 (Sump Adit 3)	03/17/2022 15:05	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 17:05
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/25/2022 04:14

Preparation and Analysis Dates Report

Work Order: B22031470
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Project Name: CV18F0126, 60571032.02.46.01

Date Revised: 3/31/2022
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053G	ERH2850 (Sump Adit 3)	03/17/2022 15:05	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 04:15
056A	ERH2849 (Trip Blank)-14894	03/17/2022 15:05	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 04:34
058B	ERH2847 (RHMW2254-01 LF)	03/17/2022 14:05	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 04:15
058C	ERH2847 (RHMW2254-01 LF)	03/17/2022 14:05	Ground Water	Diesel Range Organics		SW3520C	03/21/2022 11:48	164697	SW8015C	03/23/2022 00:39
						SW3520C	03/21/2022 11:48	164697	SW8015C	03/24/2022 23:56
058G	ERH2847 (RHMW2254-01 LF)	03/17/2022 14:05	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 04:54
061A	ERH2846 (Trip Blank)-14894	03/17/2022 14:05	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 05:14
063B	ERH2853 (RHMW11-5)	03/17/2022 12:40	Ground Water	Metals by ICP-MS, Total		SW3010A	03/21/2022 16:32	164712	SW6020	03/23/2022 08:56
063C	ERH2853 (RHMW11-5)	03/17/2022 12:40	Ground Water	Diesel Range Organics		SW3520C	03/22/2022 09:07	164697	SW8015C	03/23/2022 14:56
063G	ERH2853 (RHMW11-5)	03/17/2022 12:40	Ground Water	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 05:33
066A	ERH2852 (Trip Blank)-14525	03/17/2022 12:40	Trip Blank	EDB in Water by ECD		SW8011	03/21/2022 09:16	164679	SW8011	03/22/2022 05:53

Chemical Abstracts Service (CAS) Registry Numbers

Prepared by Billings, MT Branch

Client: AECOM - Honolulu
Workorder: B22031470 **Revised Date:** 03/31/2022
Project: CV18F0126, 60571032.02.46.01 **Report Date:** 03/28/2022

Analyses	CAS No
AGGREGATE ORGANICS	
Organic Carbon, Total (TOC)	7440-44-0
METALS, TOTAL	
Lead	7439-92-1
METALS, DISSOLVED	
Lead	7439-92-1
VOLATILE ORGANIC COMPOUNDS	
Benzene	71-43-2
Bromobenzene	108-86-1
Bromochloromethane	74-97-5
Bromodichloromethane	75-27-4
Bromoform	75-25-2
Carbon tetrachloride	56-23-5
Chlorobenzene	108-90-7
Chlorodibromomethane	124-48-1
Chloroethane	75-00-3
Chloroform	67-66-3
Chloromethane	74-87-3
1,2-Dibromoethane	106-93-4
2-Chlorotoluene	95-49-8
4-Chlorotoluene	106-43-4
Dibromomethane	74-95-3
1,2-Dichlorobenzene	95-50-1
1,3-Dichlorobenzene	541-73-1
1,4-Dichlorobenzene	106-46-7
Dichlorodifluoromethane	75-71-8
1,1-Dichloroethane	75-34-3
1,2-Dichloroethane	107-06-2
1,1-Dichloroethene	75-35-4
cis-1,2-Dichloroethene	156-59-2
trans-1,2-Dichloroethene	156-60-5
1,2-Dichloropropane	78-87-5
1,3-Dichloropropane	142-28-9
2,2-Dichloropropane	594-20-7
1,1-Dichloropropene	563-58-6
cis-1,3-Dichloropropene	10061-01-5
trans-1,3-Dichloropropene	10061-02-6
Ethylbenzene	100-41-4

Methyl ethyl ketone	78-93-3
Methyl tert-butyl ether (MTBE)	1634-04-4
Methylene chloride	75-09-2
Styrene	100-42-5
1,1,1,2-Tetrachloroethane	630-20-6
1,1,2,2-Tetrachloroethane	79-34-5
Tetrachloroethene	127-18-4
Toluene	108-88-3
1,1,1-Trichloroethane	71-55-6
1,1,2-Trichloroethane	79-00-5
Trichloroethene	79-01-6
Trichlorofluoromethane	75-69-4
1,2,3-Trichloropropane	96-18-4
Vinyl chloride	75-01-4
m+p-Xylenes	179601-23-1
o-Xylene	95-47-6
Xylenes, Total	1330-20-7

VOCS BY MICROEXTRACTION-ECD

1,2-Dibromoethane	106-93-4

PETROLEUM HYDROCARBONS-VOLATILE

C6 to C10
Total Purgeable Hydrocarbons

PETROLEUM HYDROCARBONS-SEMI-VOLATILE

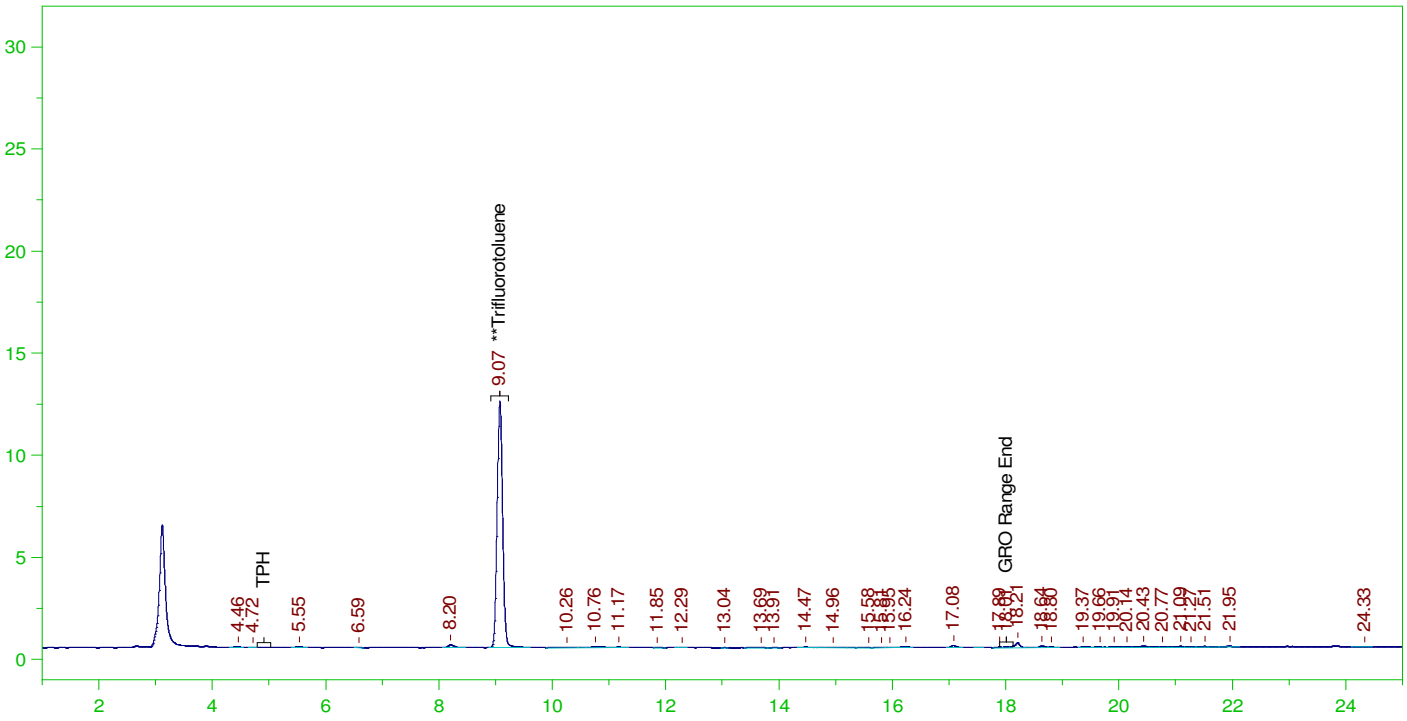
Diesel Range Organics (C10 to C24)
Diesel Range Organics (SGT-C10 to C24)
Oil Range Hydrocarbons (C24 to C40)
Oil Range Hydrocarbons (SGT-C24 to C40)
Total Extractable Hydrocarbons
Total Extractable Hydrocarbons (SGT)

ORGANIC CHARACTERISTICS

Methane	74-82-8

ERH2833 (RHMW06)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0029.RAW B22031470-001F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-001F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0029.RAW
Date & Time Acquired: 3/22/2022 12:02:49 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

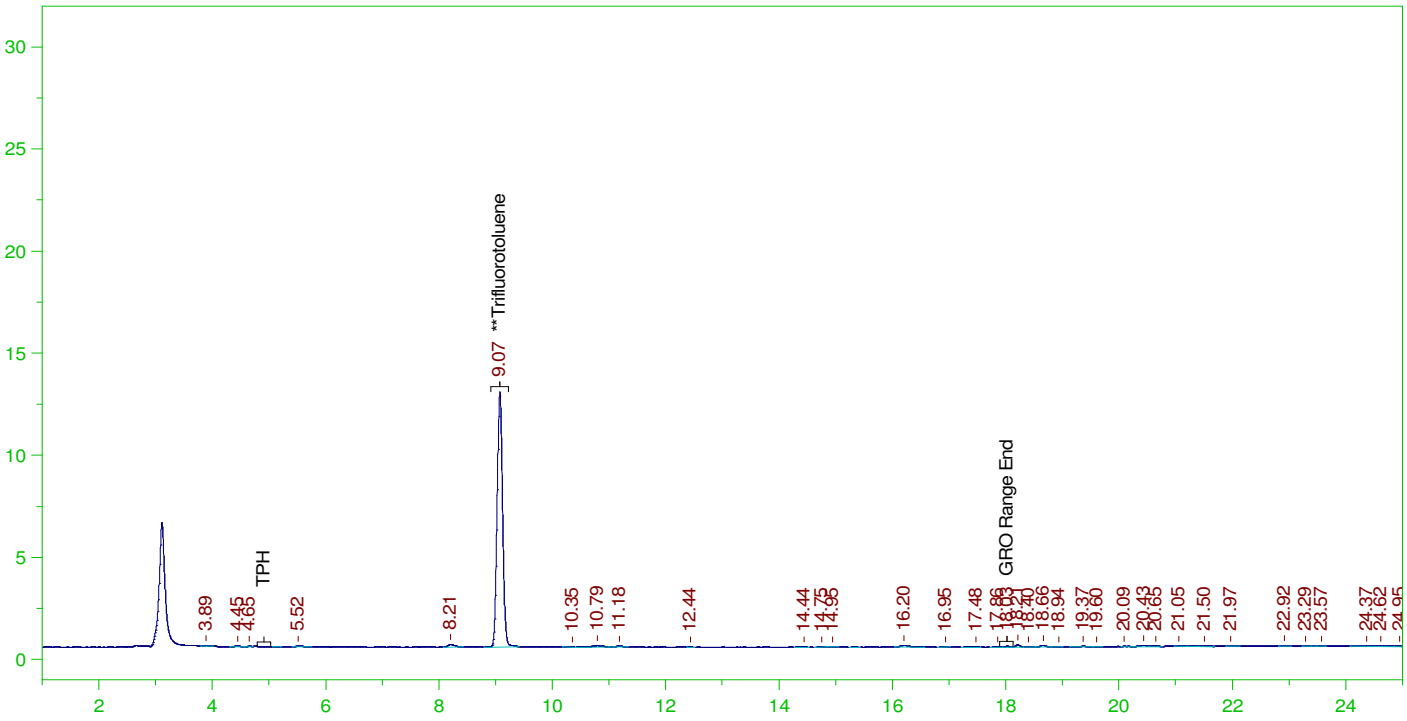
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.075	25.	17.755	71.02	-

C6 to C10 Area:5580.68 C6 to C10 Amount: 1.138939
TPH Area:10359.45 TPH Amount: 2.167987

ERH2832 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0018.RAW B22031470-003A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-003A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0018.RAW
Date & Time Acquired: 3/21/2022 5:45:30 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

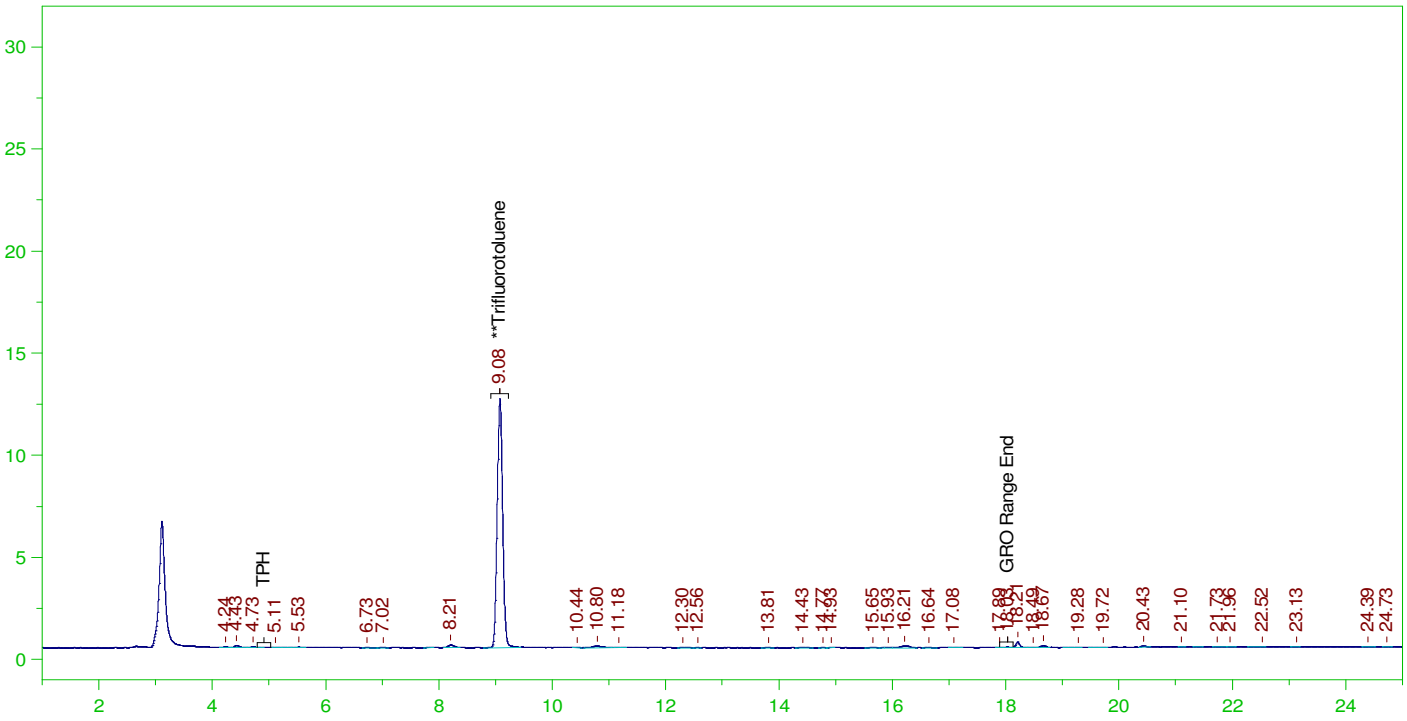
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	18.288	73.15	-

C6 to C10 Area:4712.837 C6 to C10 Amount: 0.9618242
TPH Area:9750.587 TPH Amount: 2.040566

ERH2793 (OWDFMW01)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0031.RAW B22031470-006F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-006F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0031.RAW
Date & Time Acquired: 3/22/2022 1:11:25 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

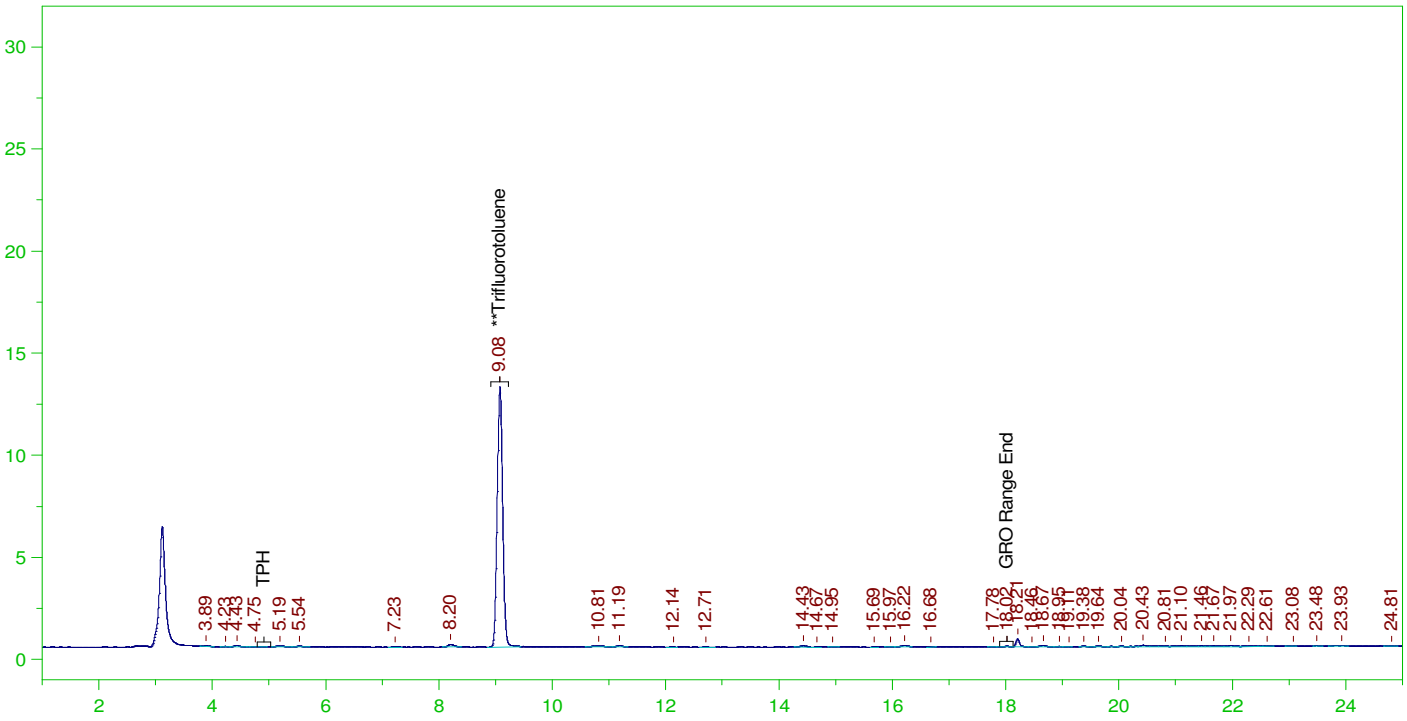
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	17.819	71.28	-

C6 to C10 Area:4975.642 C6 to C10 Amount: 1.015459
TPH Area:9158.938 TPH Amount: 1.916748

ERH2792 (Trip Blank)-14733

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0019.RAW B22031470-008A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-008A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0019.RAW
Date & Time Acquired: 3/21/2022 6:19:50 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

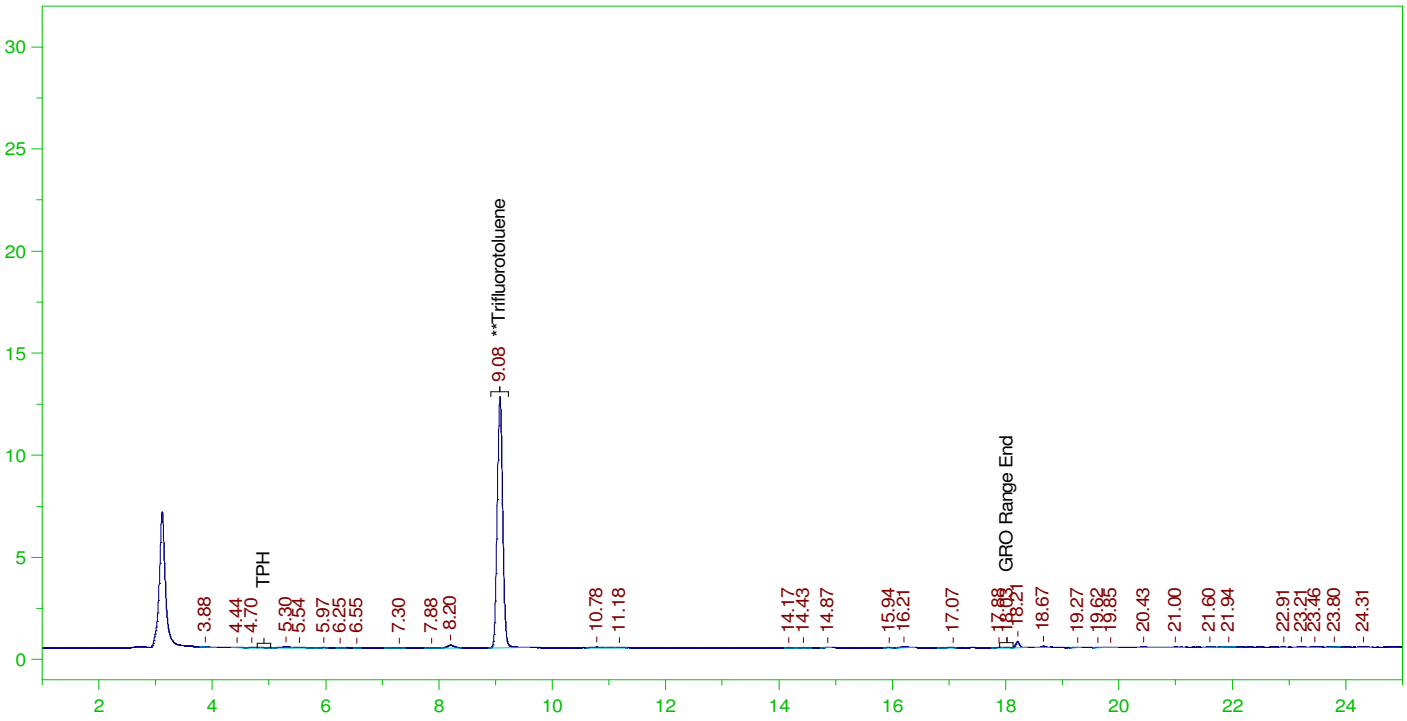
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	18.652	74.61	-

C6 to C10 Area:4793.471 C6 to C10 Amount: 0.9782805
TPH Area:12263.36 TPH Amount: 2.566429

ERH2826 (RHMW08)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0033.RAW B22031470-011F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-011F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0033.RAW
Date & Time Acquired: 3/22/2022 2:20:03 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

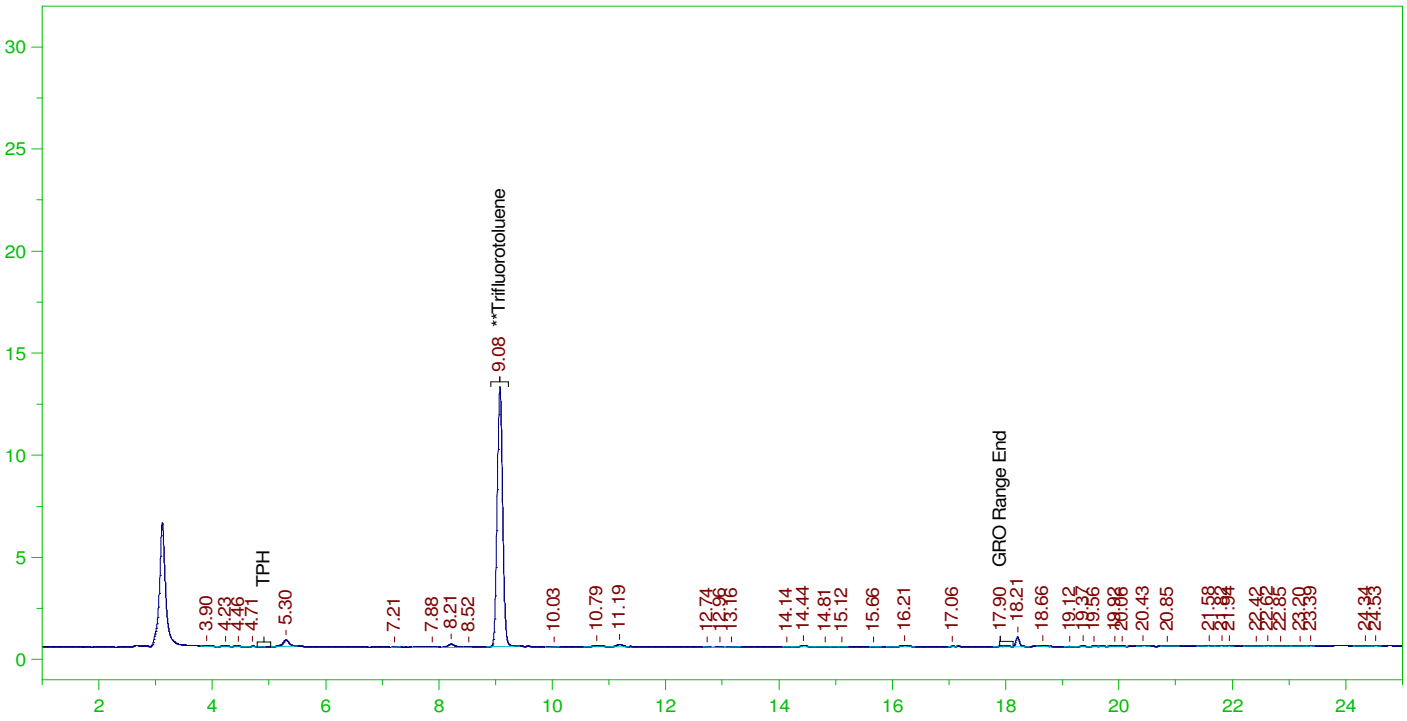
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	18.078	72.31	-

C6 to C10 Area:4874.558 C6 to C10 Amount: 0.9948292
TPH Area:8826.764 TPH Amount: 1.847232

ERH2825 (Trip Blank)-14653

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0020.RAW B22031470-013A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-013A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0020.RAW
Date & Time Acquired: 3/21/2022 6:54:13 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

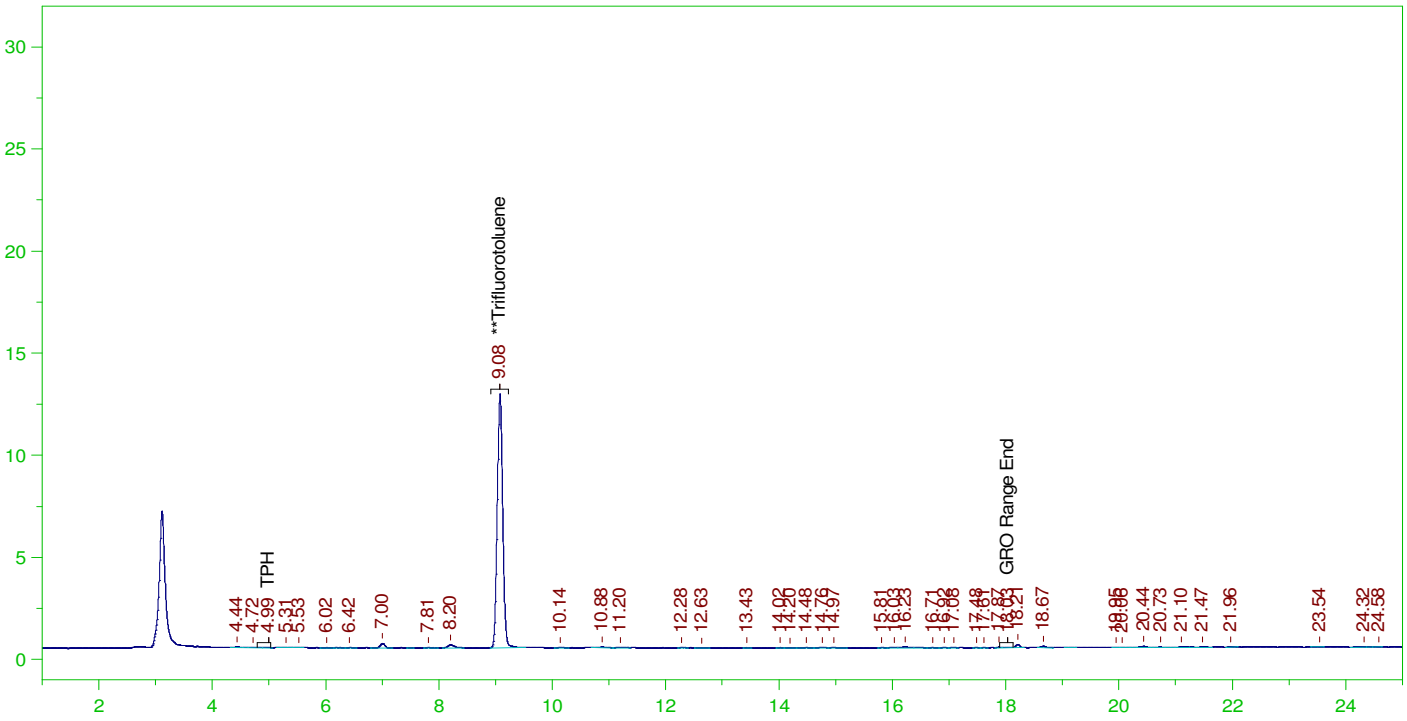
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.075	25.	18.677	74.71	-

C6 to C10 Area:8095.49 C6 to C10 Amount: 1.652176
TPH Area:13922.78 TPH Amount: 2.913707

ERH2783 (OWDFMW04A)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0035.RAW B22031470-016F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-016F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0035.RAW
Date & Time Acquired: 3/22/2022 3:28:41 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

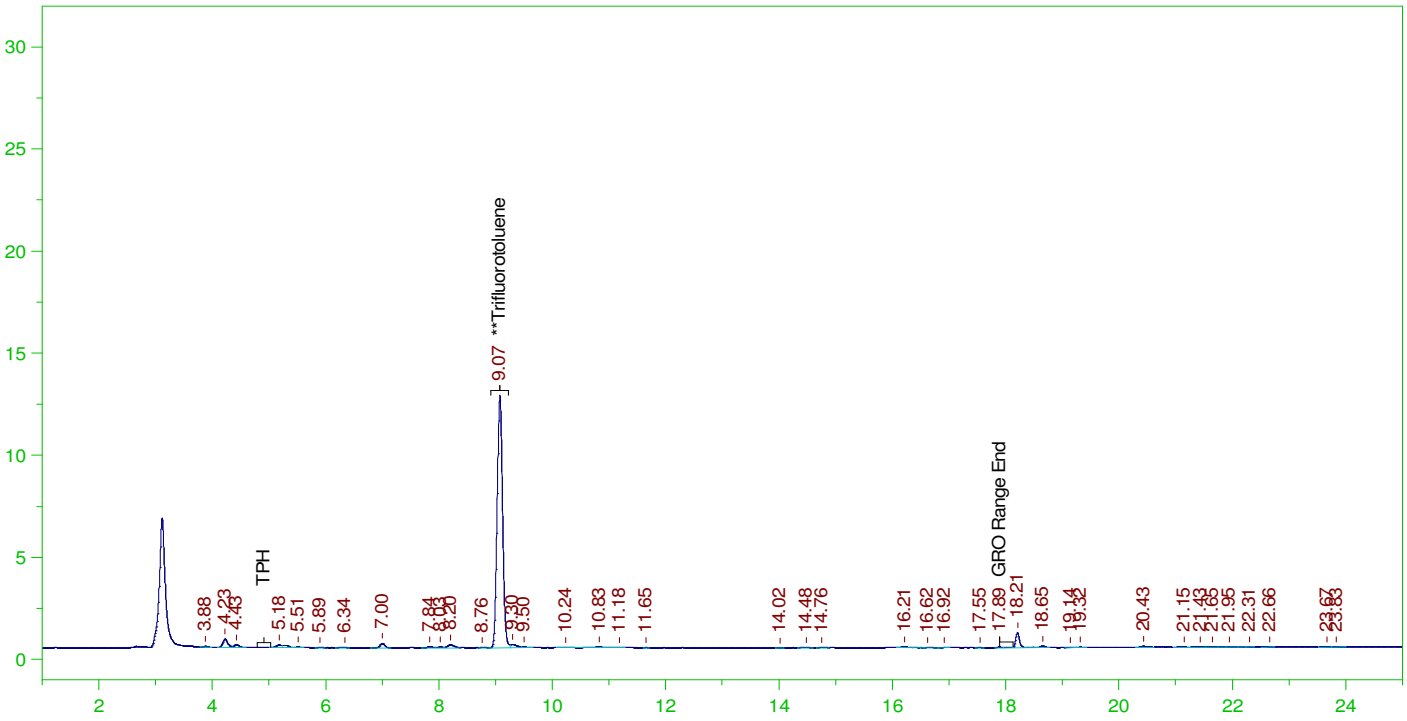
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	18.174	72.7	-

C6 to C10 Area:6534.737 C6 to C10 Amount: 1.333649
TPH Area:9859.635 TPH Amount: 2.063387

ERH2784 (OWDFMW04A FD)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0037.RAW B22031470-017C ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-017C ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0037.RAW
Date & Time Acquired: 3/22/2022 4:37:23 AM
Method File: G:\Org\VAR\Methods\220318G1470-17DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

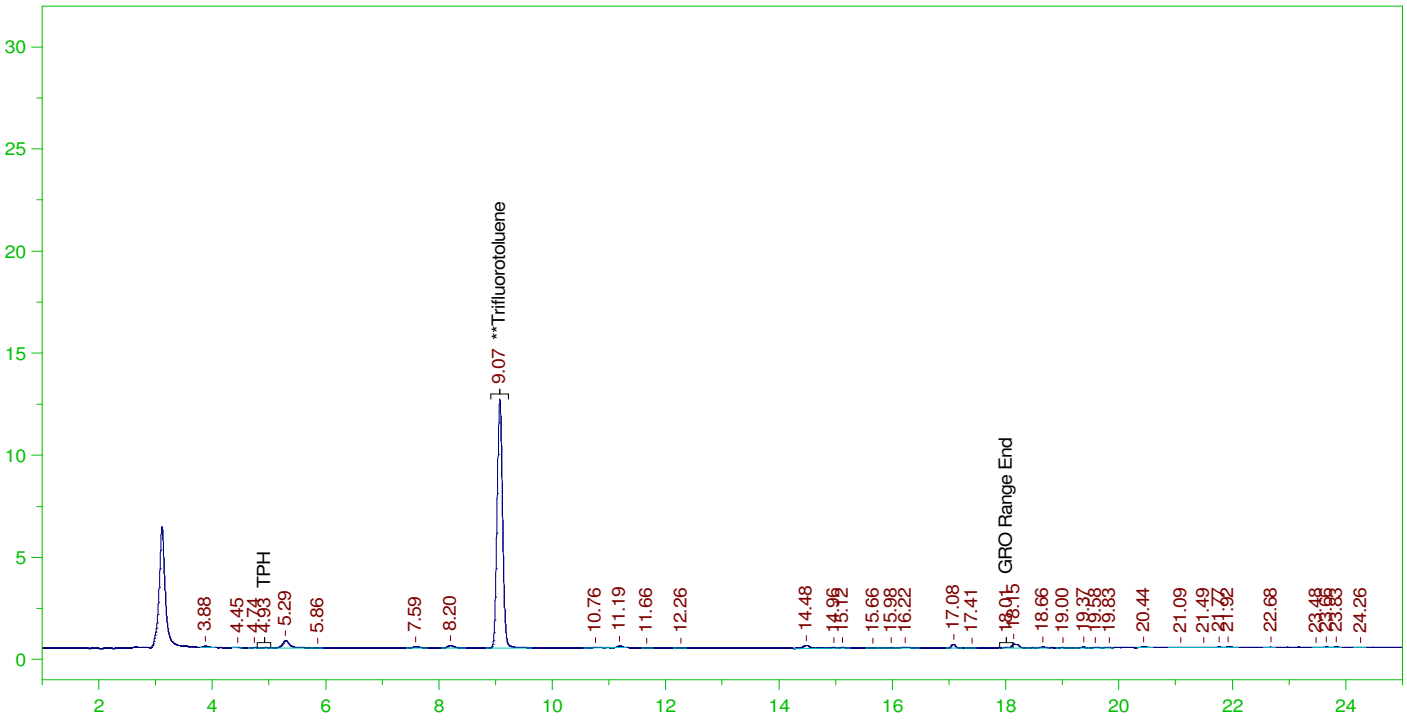
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.075	25.	18.055	72.22	-

C6 to C10 Area:8361.158 C6 to C10 Amount: 1.706396
TPH Area:17820.94 TPH Amount: 3.7295

ERH2782 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0050.RAW B22031470-019A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-019A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0050.RAW
Date & Time Acquired: 3/22/2022 12:02:54 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

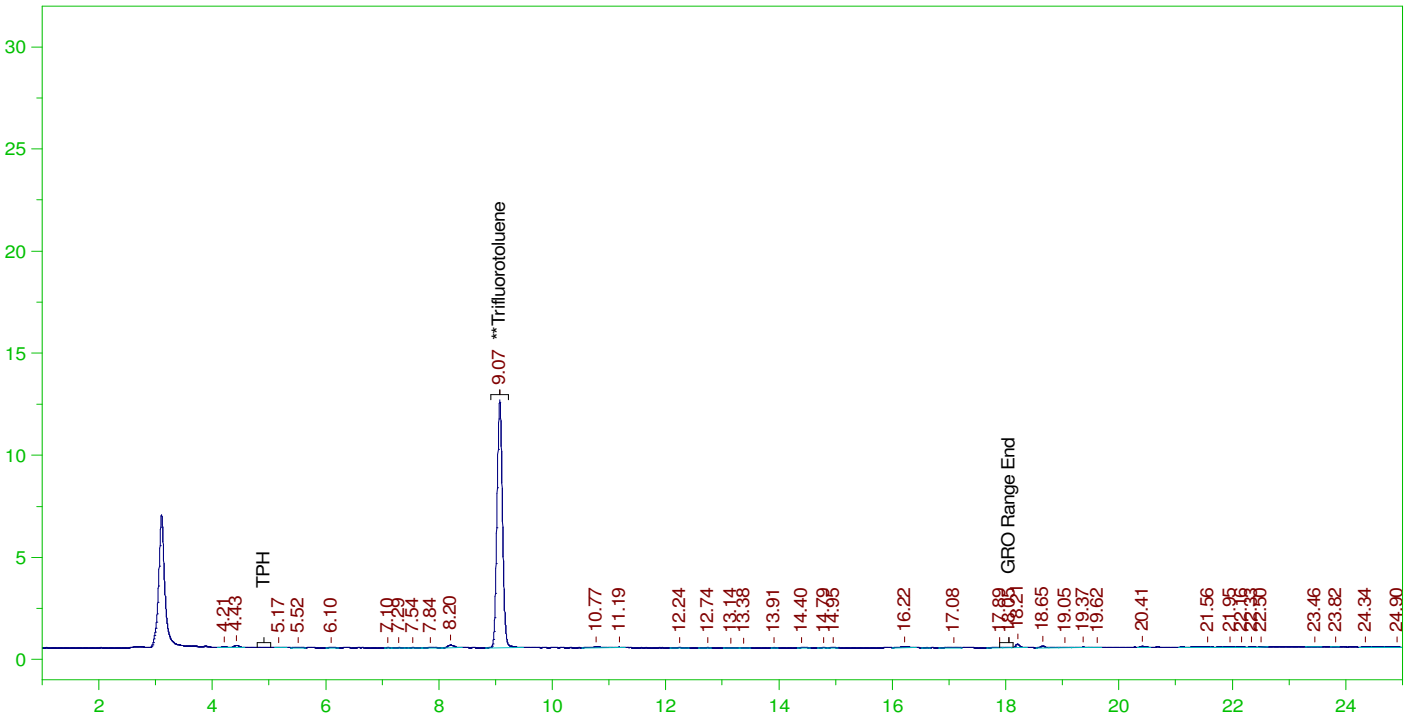
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	17.922	71.69	-

C6 to C10 Area:10112.5 C6 to C10 Amount: 2.063821
TPH Area:14969.91 TPH Amount: 3.132847

ERH2836 (RHMW13-05)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0039.RAW B22031470-022F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-022F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0039.RAW
Date & Time Acquired: 3/22/2022 5:46:02 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

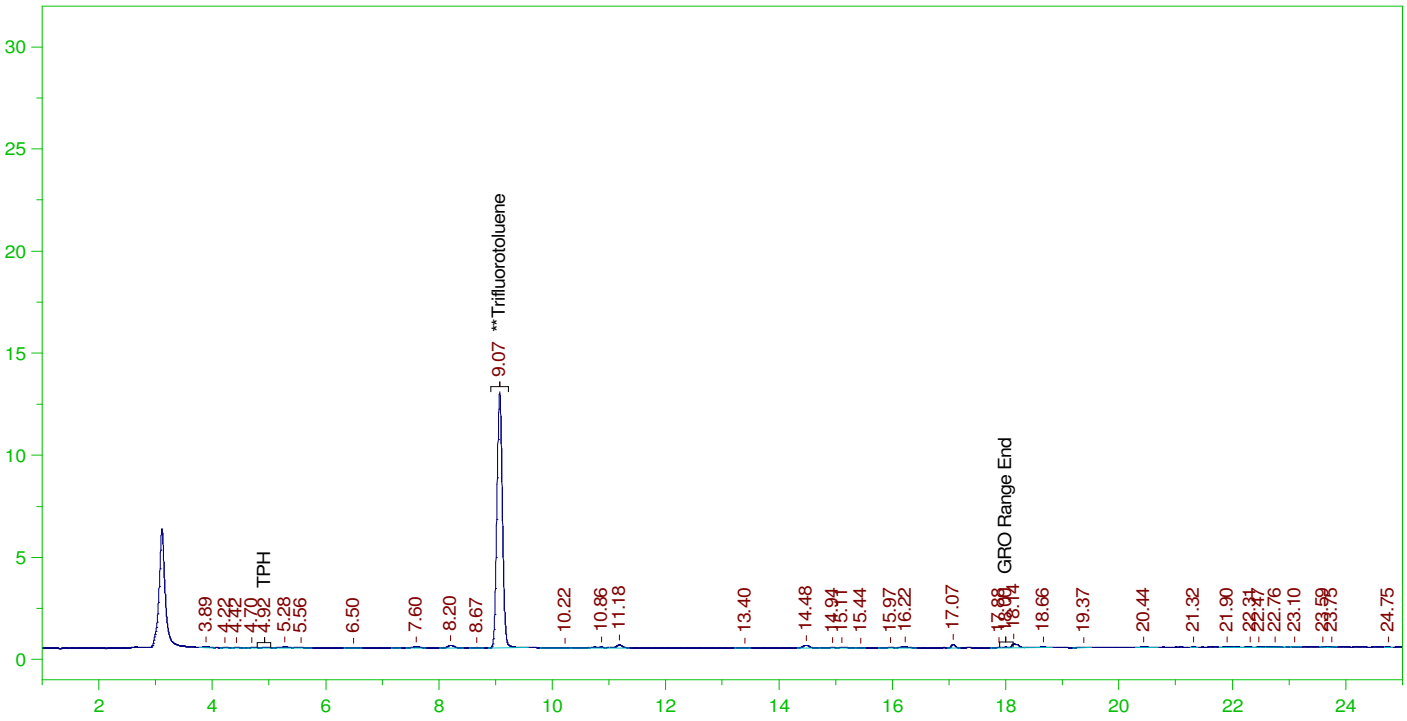
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.072	25.	17.74	70.96	-

C6 to C10 Area:4903.995 C6 to C10 Amount: 1.000837
TPH Area:9340.179 TPH Amount: 1.954677

ERH2835 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0051.RAW B22031470-024A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-024A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0051.RAW
Date & Time Acquired: 3/22/2022 12:37:10 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

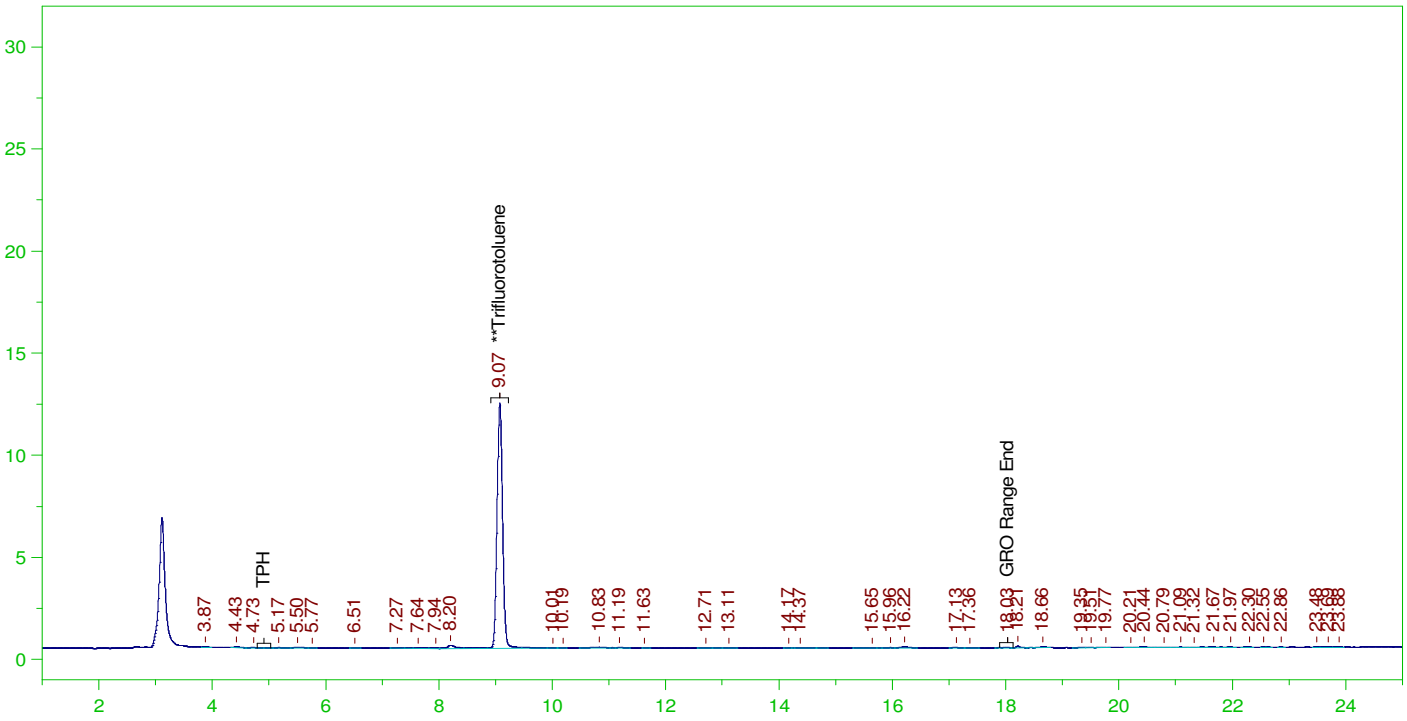
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.071	25.	18.418	73.67	-

C6 to C10 Area:9432.329 C6 to C10 Amount: 1.925007
TPH Area:13794.16 TPH Amount: 2.88679

ERH2823 (OWDFMW07A)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0041.RAW B22031470-027F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-027F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0041.RAW
Date & Time Acquired: 3/22/2022 6:54:42 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

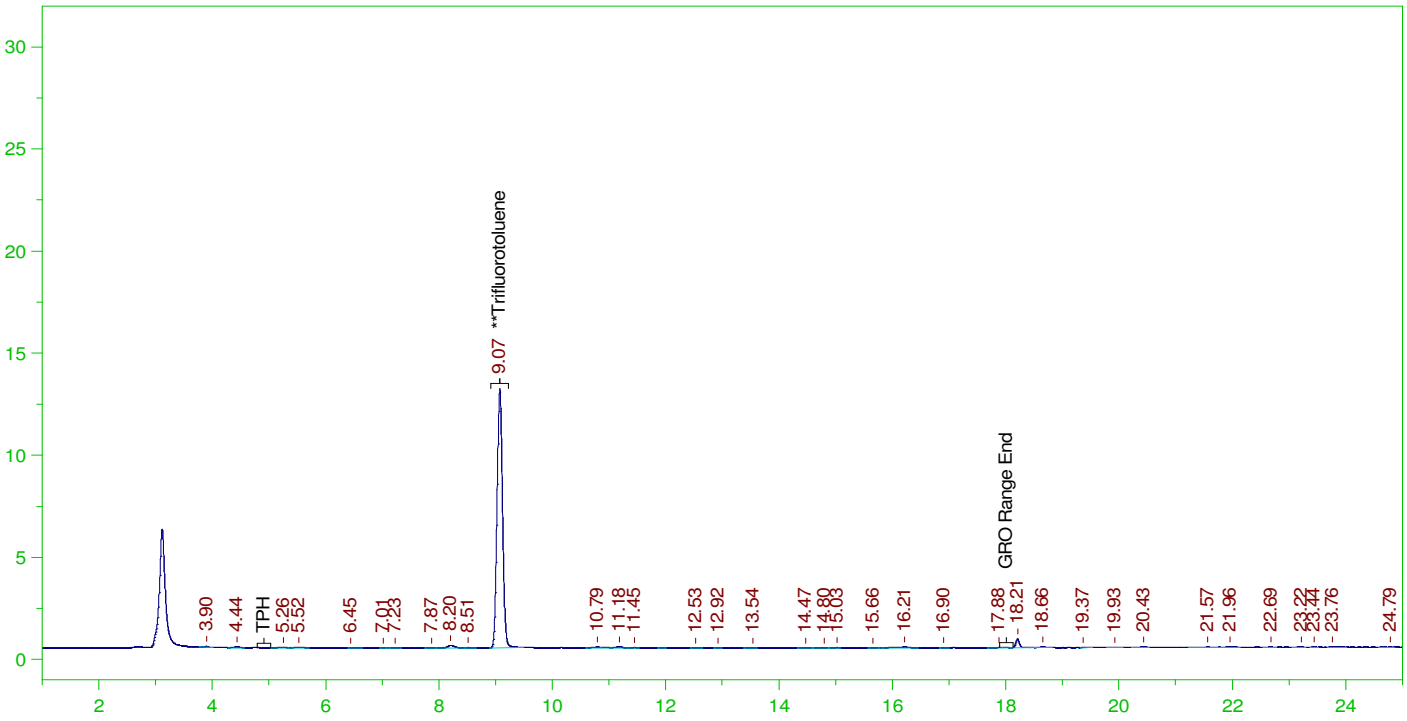
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.073	25.	17.746	70.99	-

C6 to C10 Area:6019.682 C6 to C10 Amount: 1.228533
TPH Area:10306.97 TPH Amount: 2.157004

ERH2822 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0052.RAW B22031470-029A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-029A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0052.RAW
Date & Time Acquired: 3/22/2022 1:11:28 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

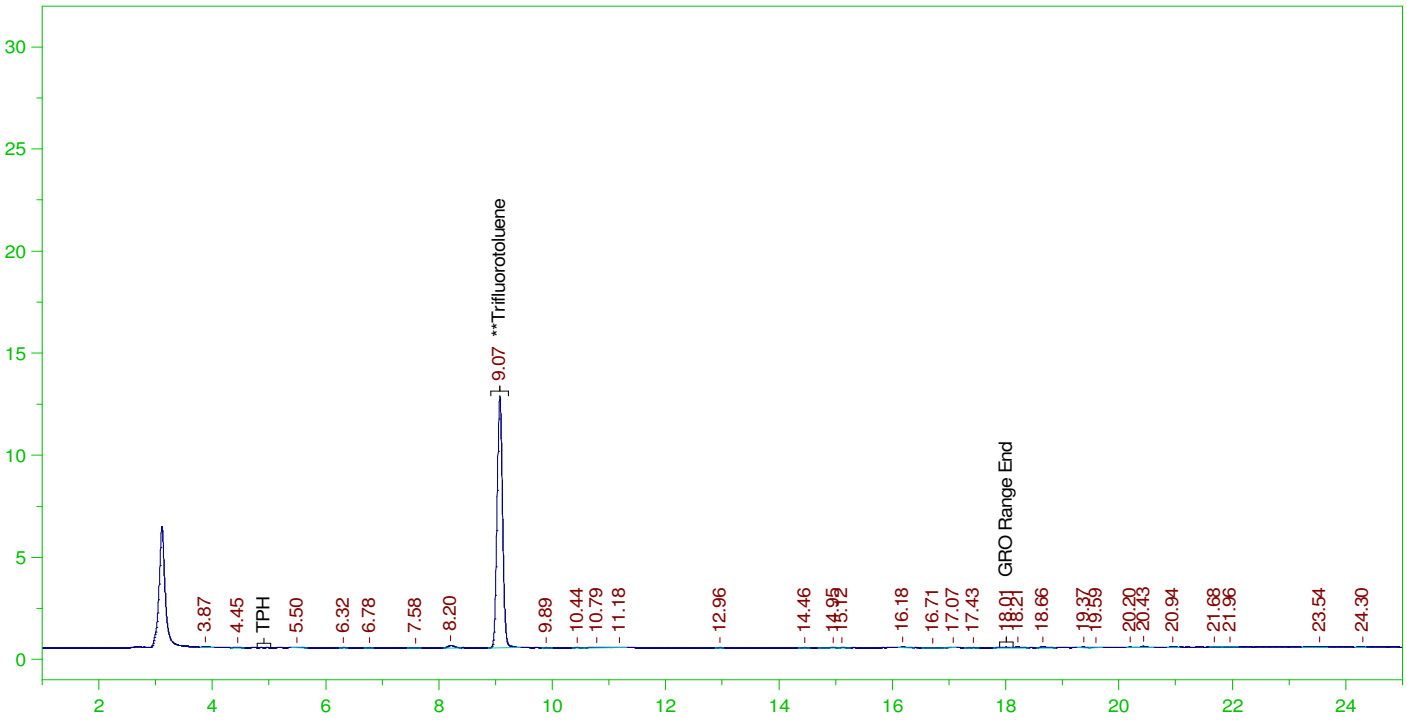
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.073	25.	18.596	74.39	-

C6 to C10 Area:5421.952 C6 to C10 Amount: 1.106545
TPH Area:10208.53 TPH Amount: 2.136403

ERH2841 (RHMW09)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0048.RAW B22031470-032F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-032F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0048.RAW
Date & Time Acquired: 3/22/2022 10:54:28 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

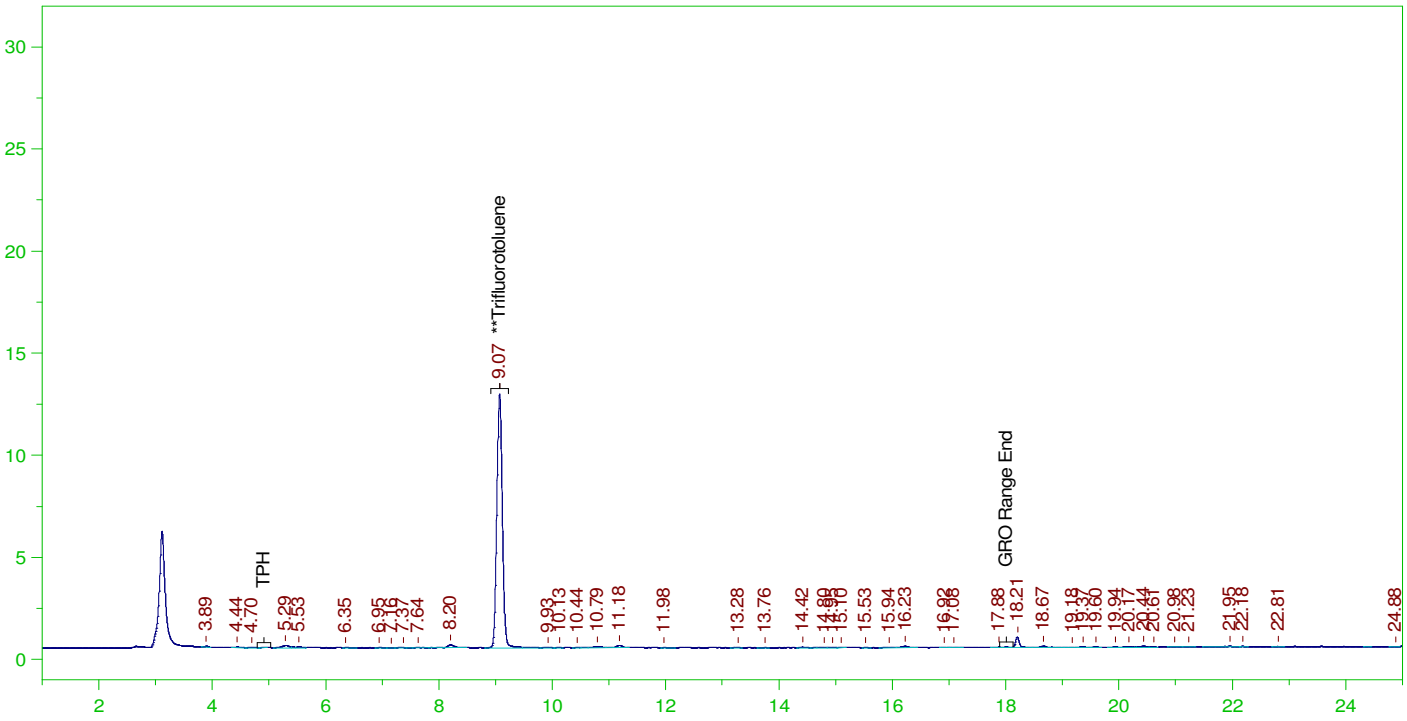
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	18.023	72.09	-

C6 to C10 Area:3594.602 C6 to C10 Amount: 0.7336081
TPH Area:6253.308 TPH Amount: 1.308669

ERH2840 (Trip Blank)-14894

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0053.RAW B22031470-034A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-034A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0053.RAW
Date & Time Acquired: 3/22/2022 1:45:50 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

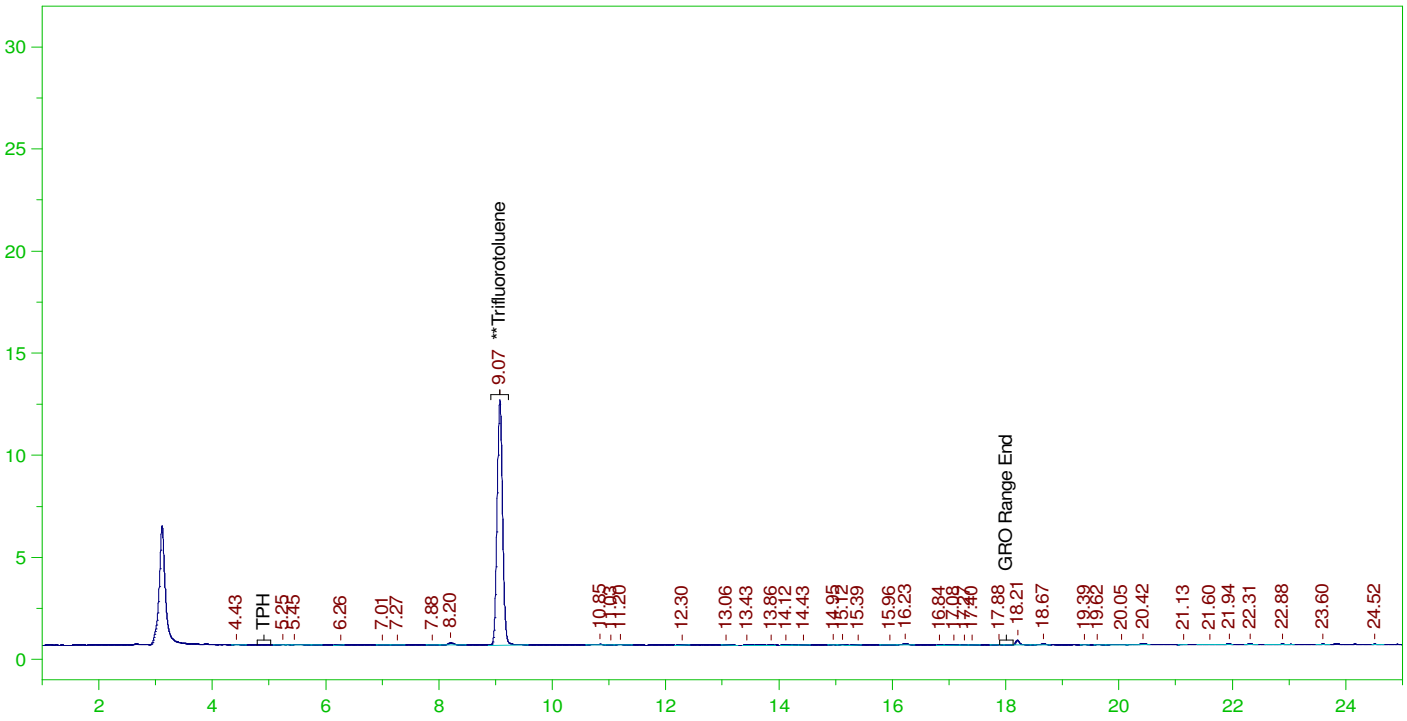
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.069	25.	18.405	73.62	-

C6 to C10 Area:6750.214 C6 to C10 Amount: 1.377624
TPH Area:12971.94 TPH Amount: 2.71472

ERH2788 (OWDFMW08A)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0088.RAW B22031470-037F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-037F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0088.RAW
Date & Time Acquired: 3/23/2022 9:47:23 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

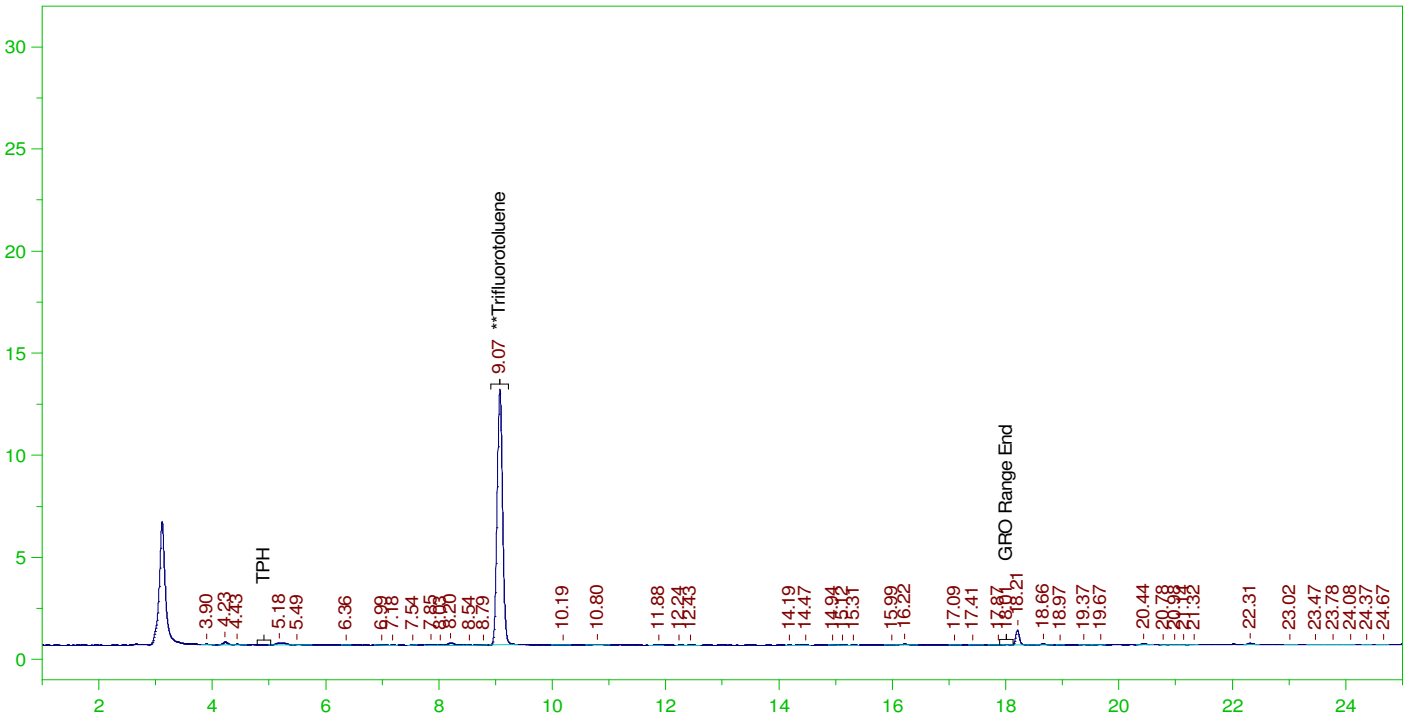
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	17.624	70.5	-

C6 to C10 Area:5593.064 C6 to C10 Amount: 1.141466
TPH Area:9876.704 TPH Amount: 2.066959

ERH2789 (OWDFMW08A FD)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0087.RAW B22031470-038C ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-038C ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0087.RAW
Date & Time Acquired: 3/23/2022 9:13:05 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

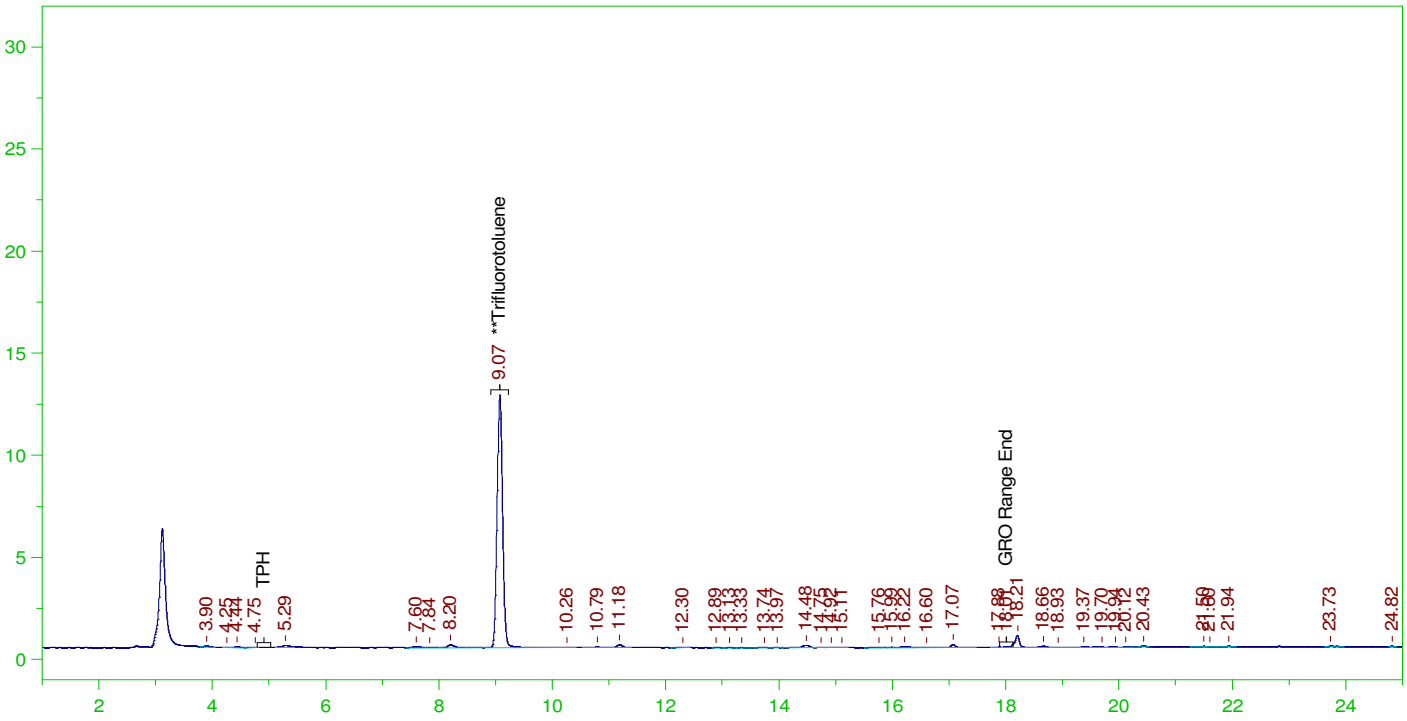
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	18.281	73.12	-

C6 to C10 Area:6826.921 C6 to C10 Amount: 1.393279
TPH Area:14373.62 TPH Amount: 3.008056

ERH2787 (Trip Blank)-14894

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0054.RAW B22031470-040A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-040A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0054.RAW
Date & Time Acquired: 3/22/2022 2:20:09 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

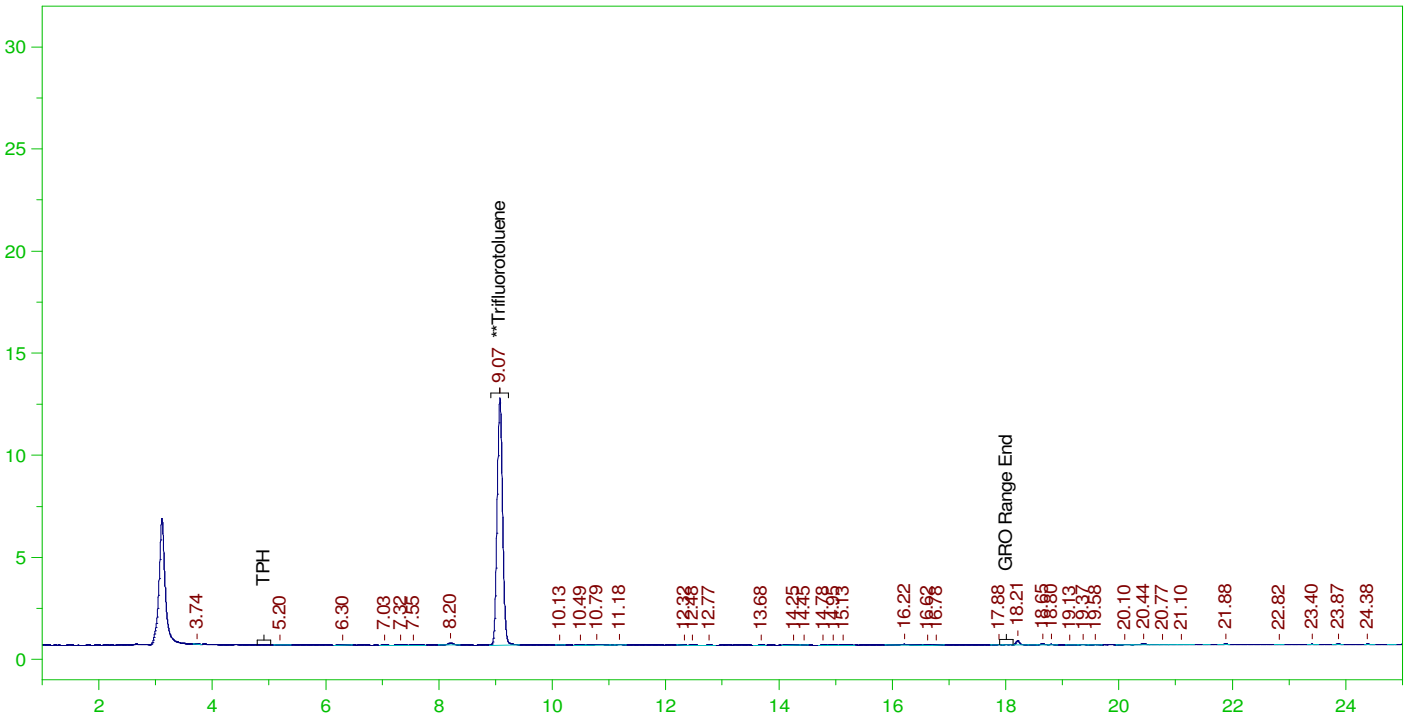
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	18.264	73.06	-

C6 to C10 Area:9058.552 C6 to C10 Amount: 1.848724
TPH Area:16321.42 TPH Amount: 3.415685

ERH2830 (OWDFMW05A)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0089.RAW B22031470-043F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-043F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0089.RAW
Date & Time Acquired: 3/23/2022 10:21:36 AM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

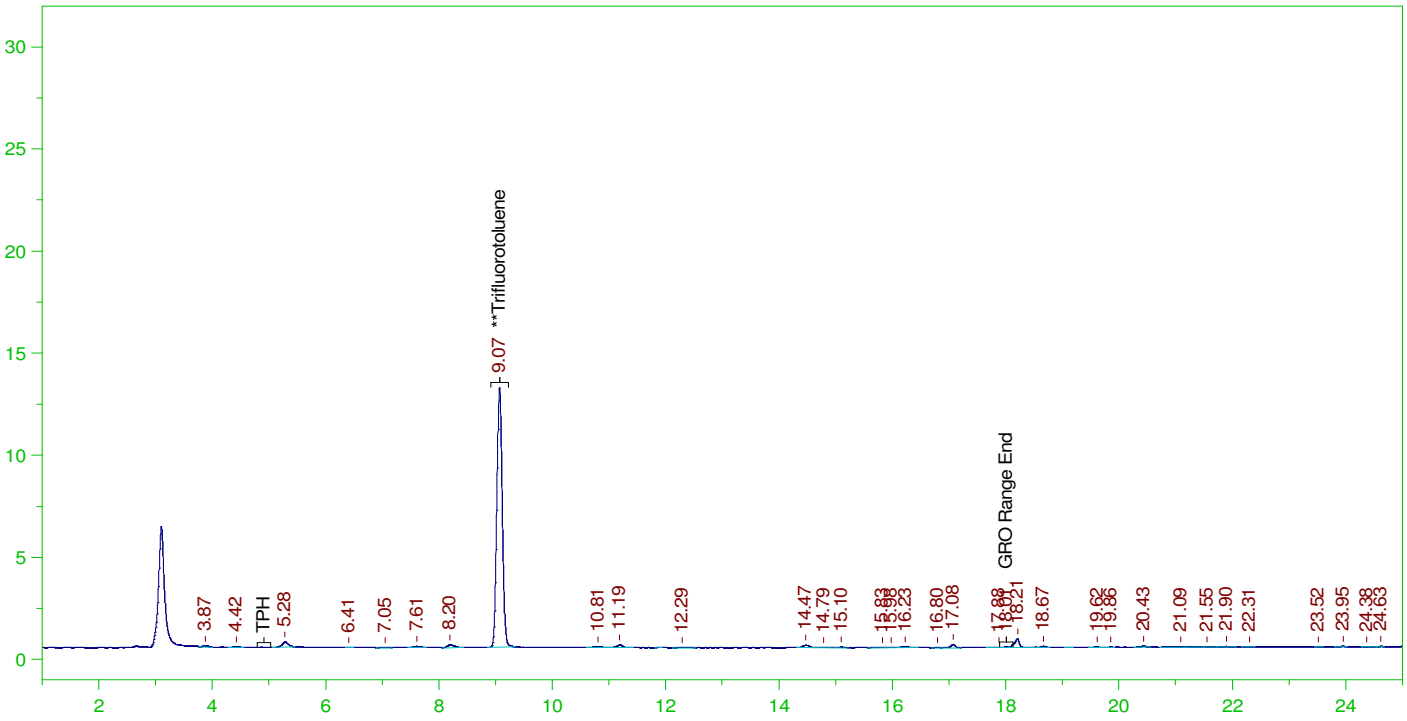
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.074	25.	17.665	70.66	-

C6 to C10 Area:5352.998 C6 to C10 Amount: 1.092472
TPH Area:8999.647 TPH Amount: 1.883412

ERH2829 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0055.RAW B22031470-045A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-045A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0055.RAW
Date & Time Acquired: 3/22/2022 2:54:28 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

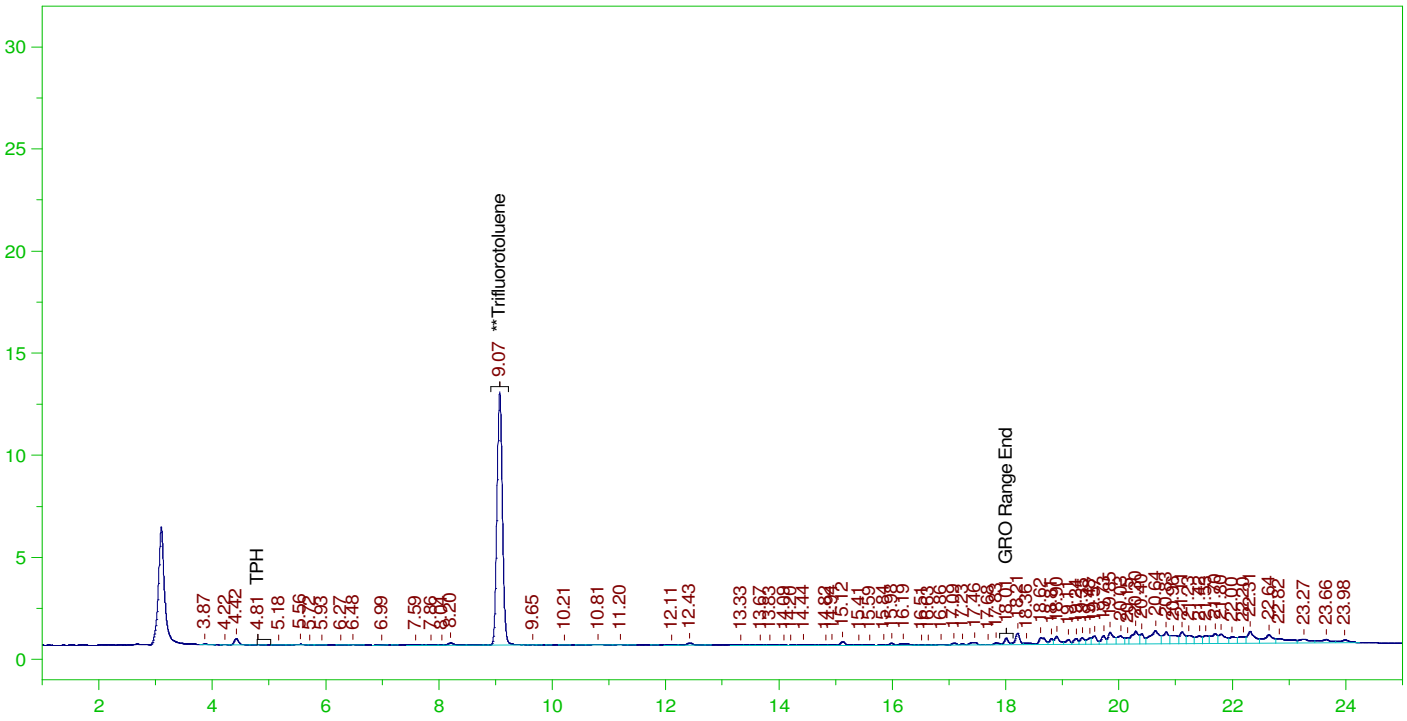
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.069	25.	18.526	74.11	-

C6 to C10 Area:9255.162 C6 to C10 Amount: 1.888849
TPH Area:14999.67 TPH Amount: 3.139075

ERH2844 (RHMW2254-01 B)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0090.RAW B22031470-048F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-048F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0090.RAW
Date & Time Acquired: 3/23/2022 10:55:52 AM
Method File: G:\Org\VAR\Methods\220318G1470-48DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

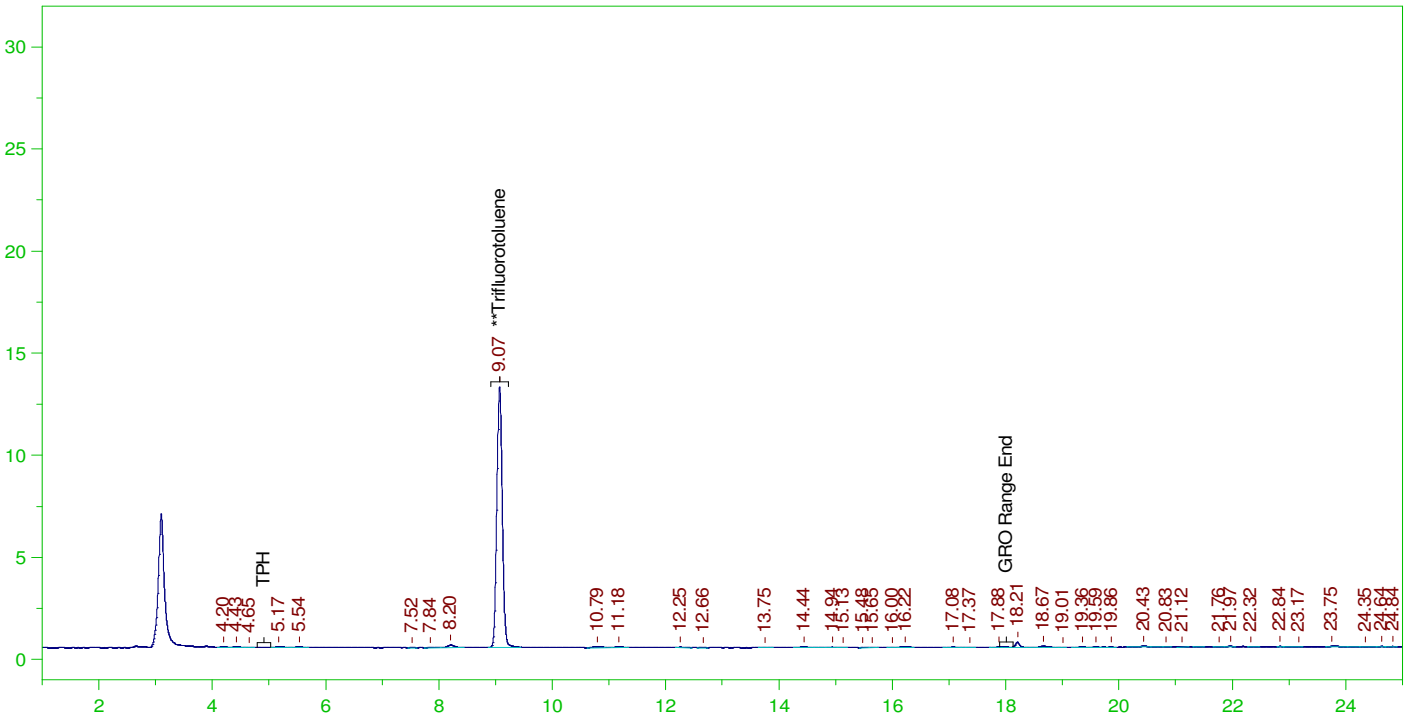
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.071	25.	18.181	72.73	-

C6 to C10 Area:15382.87 C6 to C10 Amount: 3.139429
TPH Area:116169.6 TPH Amount: 24.31154

ERH2843 (Trip Blank)-14754

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0056.RAW B22031470-050A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-050A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0056.RAW
Date & Time Acquired: 3/22/2022 3:28:50 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

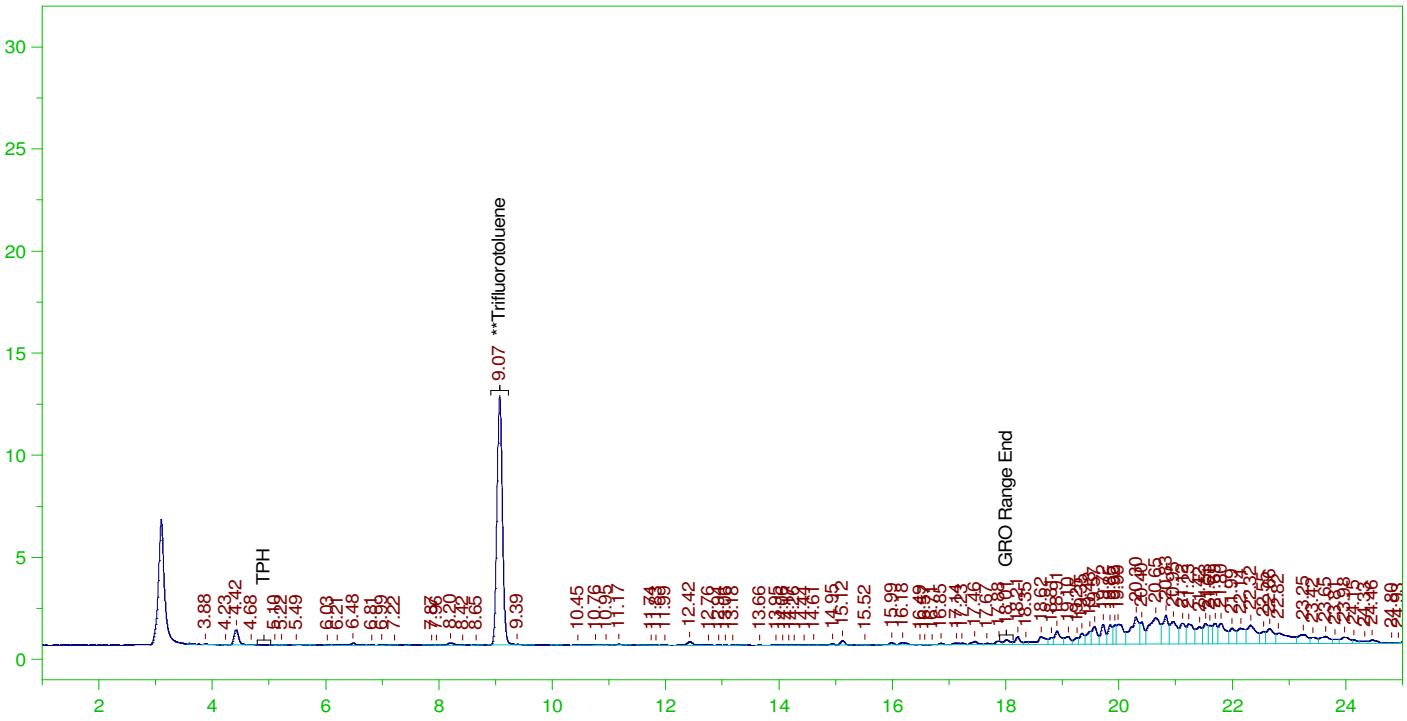
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.069	25.	18.66	74.64	-

C6 to C10 Area:5113.424 C6 to C10 Amount: 1.043579
TPH Area:9880.775 TPH Amount: 2.067811

ERH2850 (Sump Adit 3)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0092.RAW B22031470-053F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-053F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0092.RAW
Date & Time Acquired: 3/23/2022 12:04:27 PM
Method File: G:\Org\VAR\Methods\220318G1470-53DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

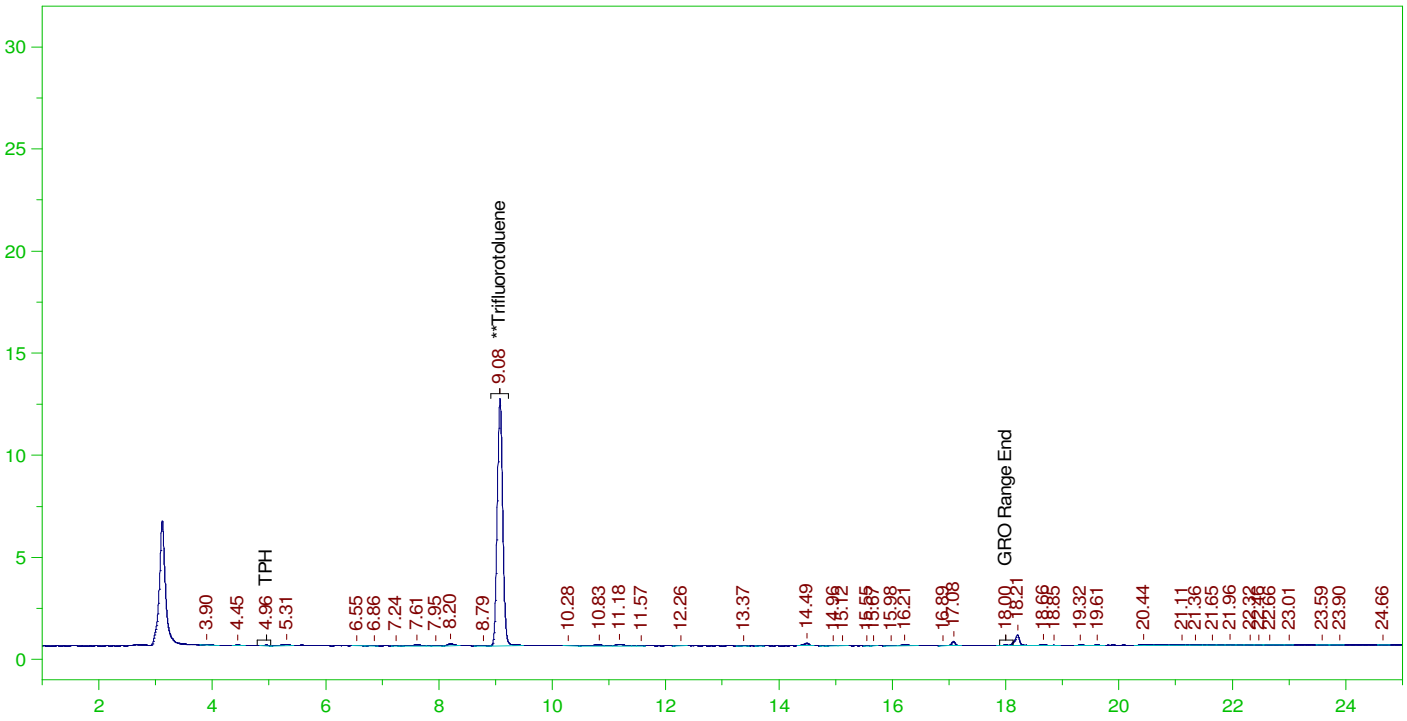
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.071	25.	17.813	71.25	-

C6 to C10 Area:20358.52 C6 to C10 Amount: 4.15489
TPH Area:241928.6 TPH Amount: 50.62991

ERH2849 (Trip Blank)-14894

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0096.RAW B22031470-055A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-055A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0096.RAW
Date & Time Acquired: 3/23/2022 2:21:45 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

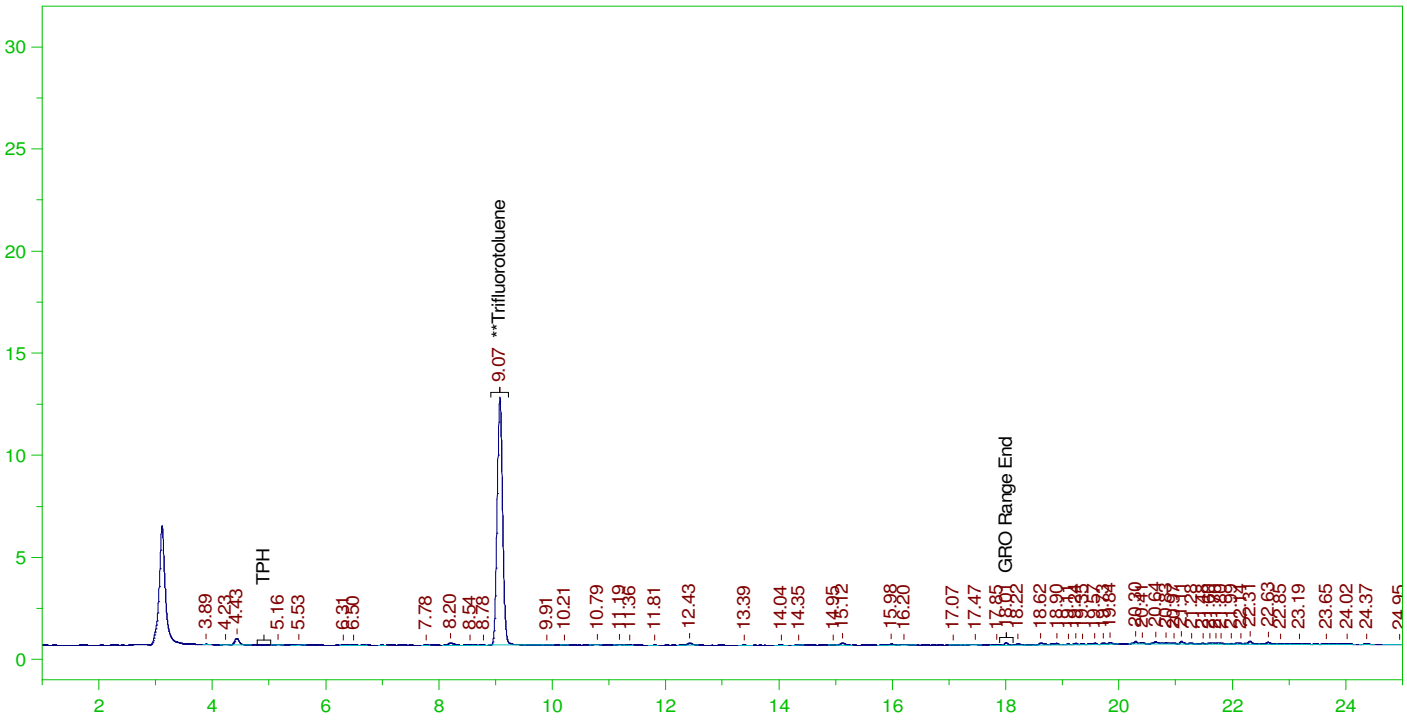
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	17.737	70.95	-

C6 to C10 Area:8490.271 C6 to C10 Amount: 1.732746
TPH Area:15714.56 TPH Amount: 3.288684

ERH2847 (RHMW2254-01 LF)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0094.RAW B22031470-058F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-058F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0094.RAW
Date & Time Acquired: 3/23/2022 1:13:07 PM
Method File: G:\Org\VAR\Methods\220318G1470-58DoDB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

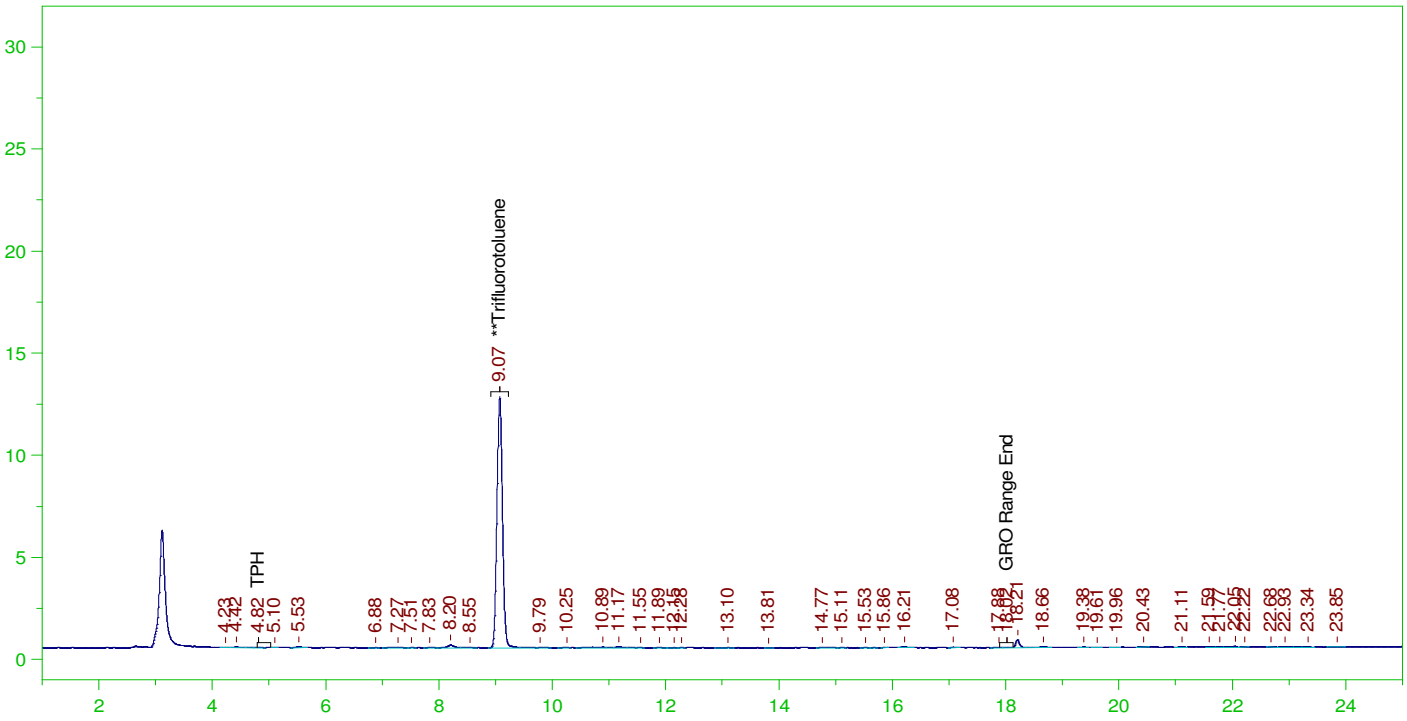
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.075	25.	17.831	71.32	-

C6 to C10 Area:7073.91 C6 to C10 Amount: 1.443686
TPH Area:19292.38 TPH Amount: 4.037436

ERH2846 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0057.RAW B22031470-060A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-060A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0057.RAW
Date & Time Acquired: 3/22/2022 4:03:09 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

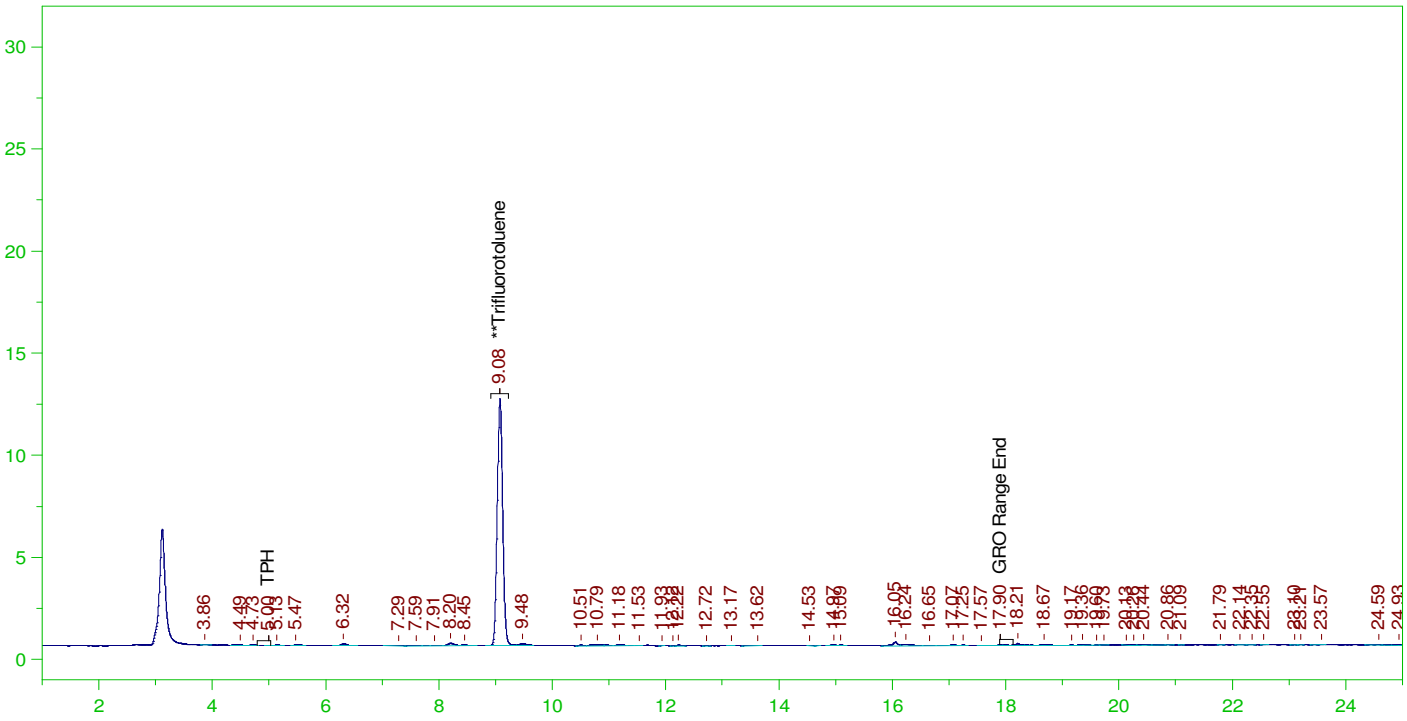
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.072	25.	18.137	72.55	-

C6 to C10 Area:6020.356 C6 to C10 Amount: 1.228671
TPH Area:10811.06 TPH Amount: 2.262499

ERH2853 (RHMW11-5)

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0097.RAW B22031470-063F ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-063F ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0097.RAW
Date & Time Acquired: 3/23/2022 2:56:06 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

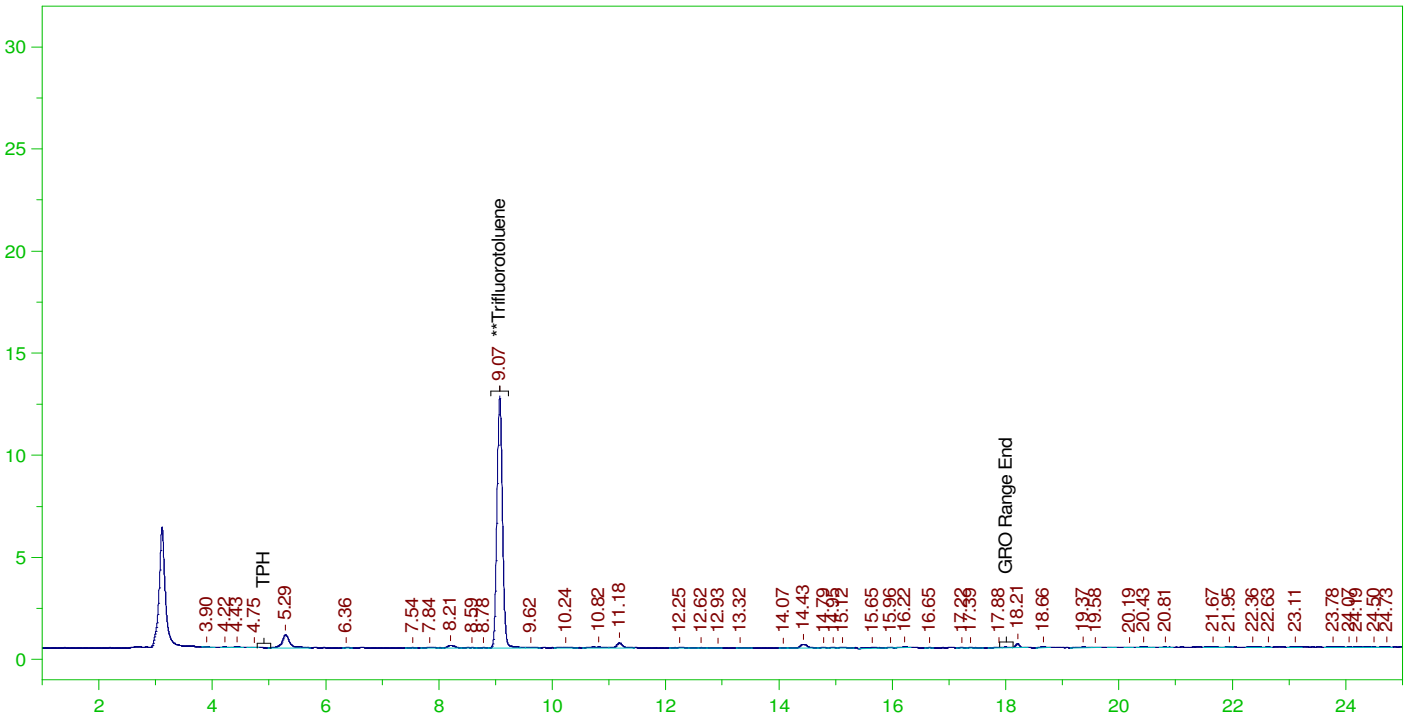
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.076	25.	17.767	71.07	-

C6 to C10 Area:10430.43 C6 to C10 Amount: 2.128705
TPH Area:15881.71 TPH Amount: 3.323664

ERH2852 (Trip Blank)-14833

G:\Org\VAR\DAT\VAR032122_b\0321VARB.0058.RAW B22031470-065A ;0321VAR , $HC-8015-GRO-W,



GASOLINE RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-065A ;0321VAR , $HC-8015-GRO-W,
Raw File: G:\Org\VAR\DAT\VAR032122_b\0321VARB.0058.RAW
Date & Time Acquired: 3/22/2022 4:37:28 PM
Method File: G:\Org\VAR\Methods\220318GRO_DoDAB%.MET
Calibration File: G:\Org\VAR\Cals\211208_220318GRO8015CB.CAL
Sample Weight: 5 Dilution: 1 S.A.: 1

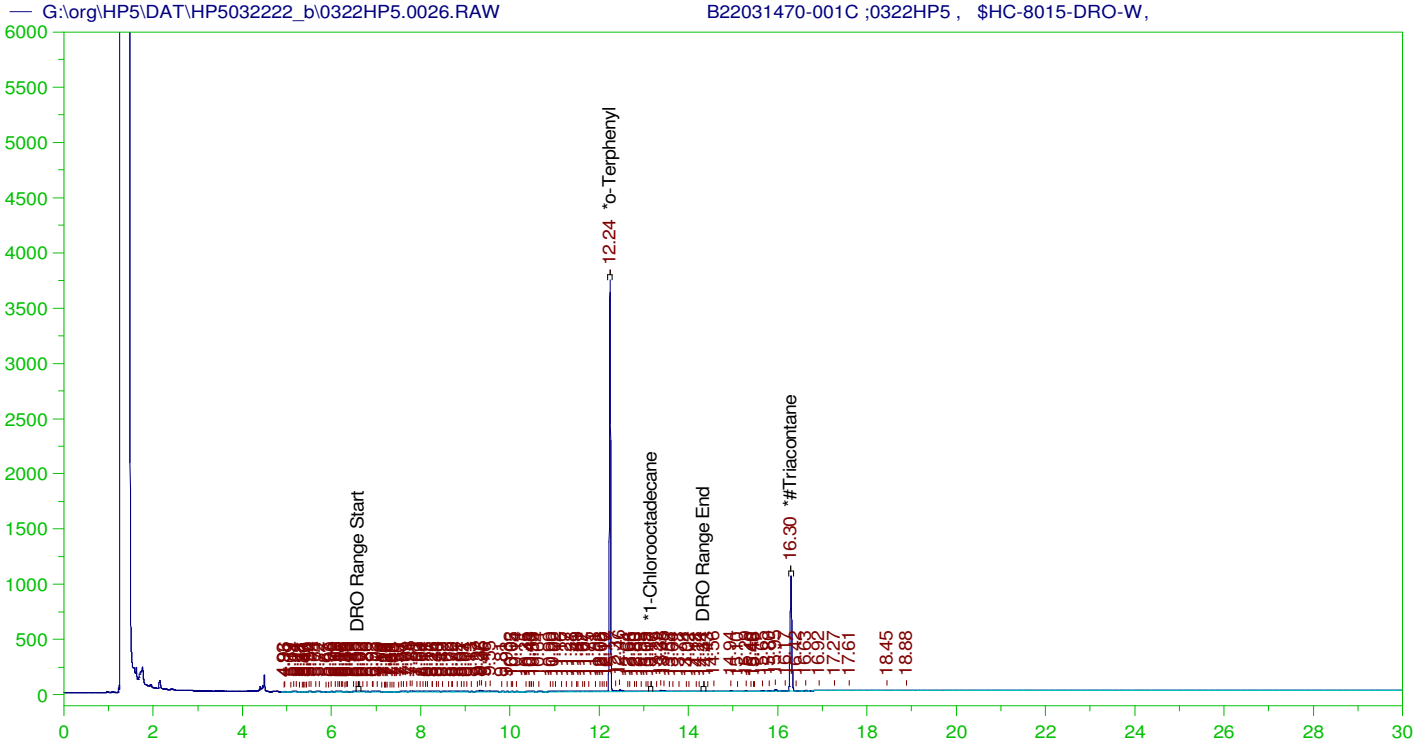
Mean RF for C6 to C10: 979.9788
Mean RF for TPH: 955.6747
Rt range for Gasoline Range Organics: 4.79 to 18.13

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
**Trifluorotoluene	9.071	25.	18.168	72.67	-

C6 to C10 Area:16386.46 C6 to C10 Amount: 3.344247
TPH Area:21450.01 TPH Amount: 4.488976

ERH2833 (RHMW06) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0026.RAW B22031470-001C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-001C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0026.RAW
Date & Time Acquired: 3/23/2022 2:05:06 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

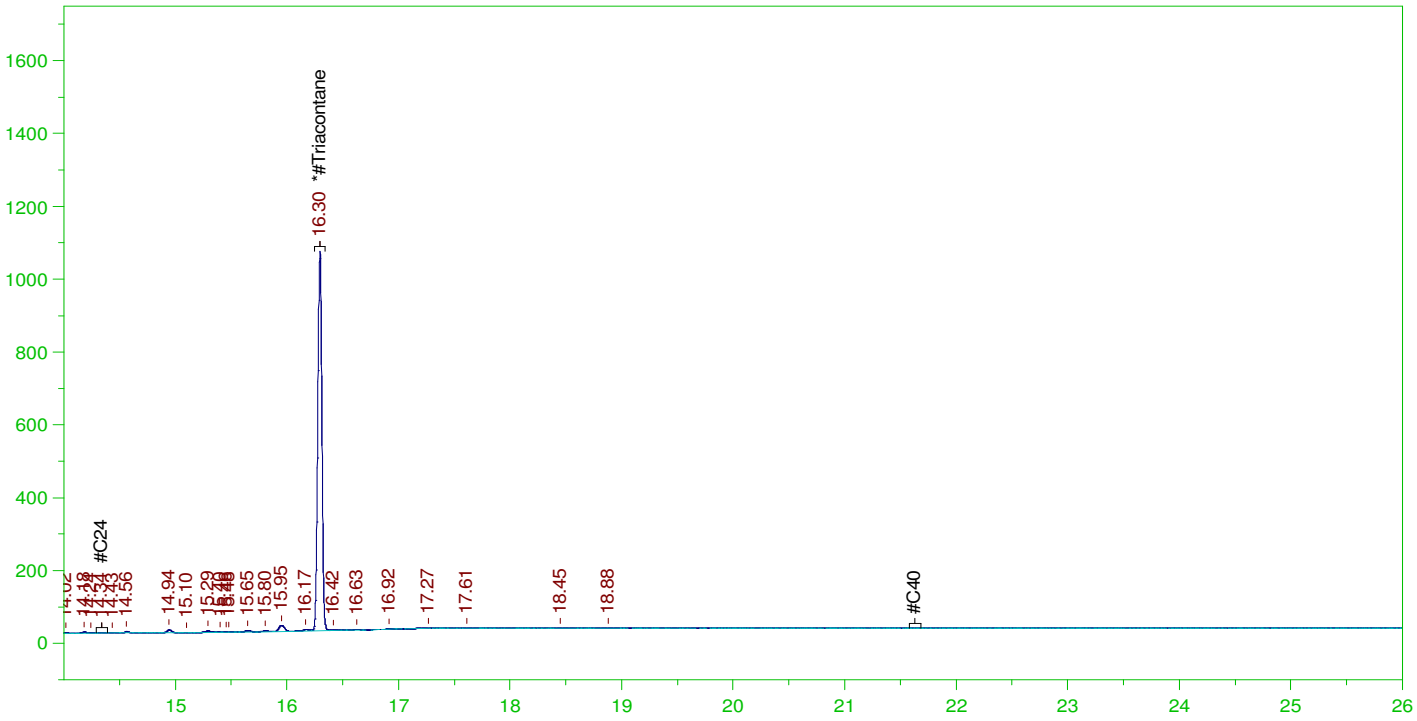
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.184	96.43	-
*1-Chlorooctadecane	13.17	.19	.	.01	-
*#Triacontane	16.295	.19	.086	45.31	-

DRO Area:647084.8 DRO Amount: 1.886043E-02
TEH Area:901950.3 TEH Amount: 2.628893E-02

ERH2833 (RHMW06) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0026.RAW B22031470-001C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-001C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0026.RAW
Date & Time Acquired: 3/23/2022 2:05:06 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

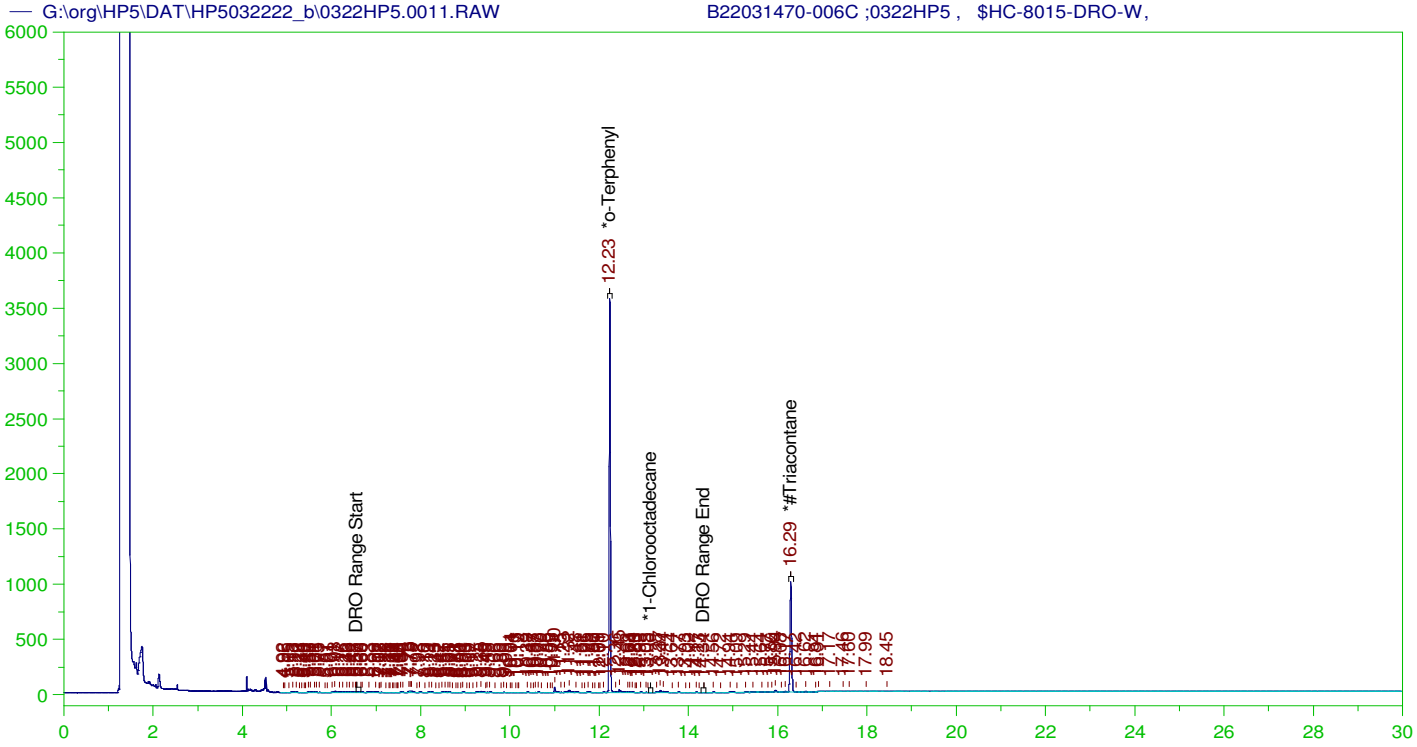
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	.476	.086	18.12	-

RRO Area:176882.5 RRO AMOUNT: 6.375115E-03

ERH2793 (OWDFMW01) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0011.RAW B22031470-006C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-006C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0011.RAW
Date & Time Acquired: 3/22/2022 3:24:26 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

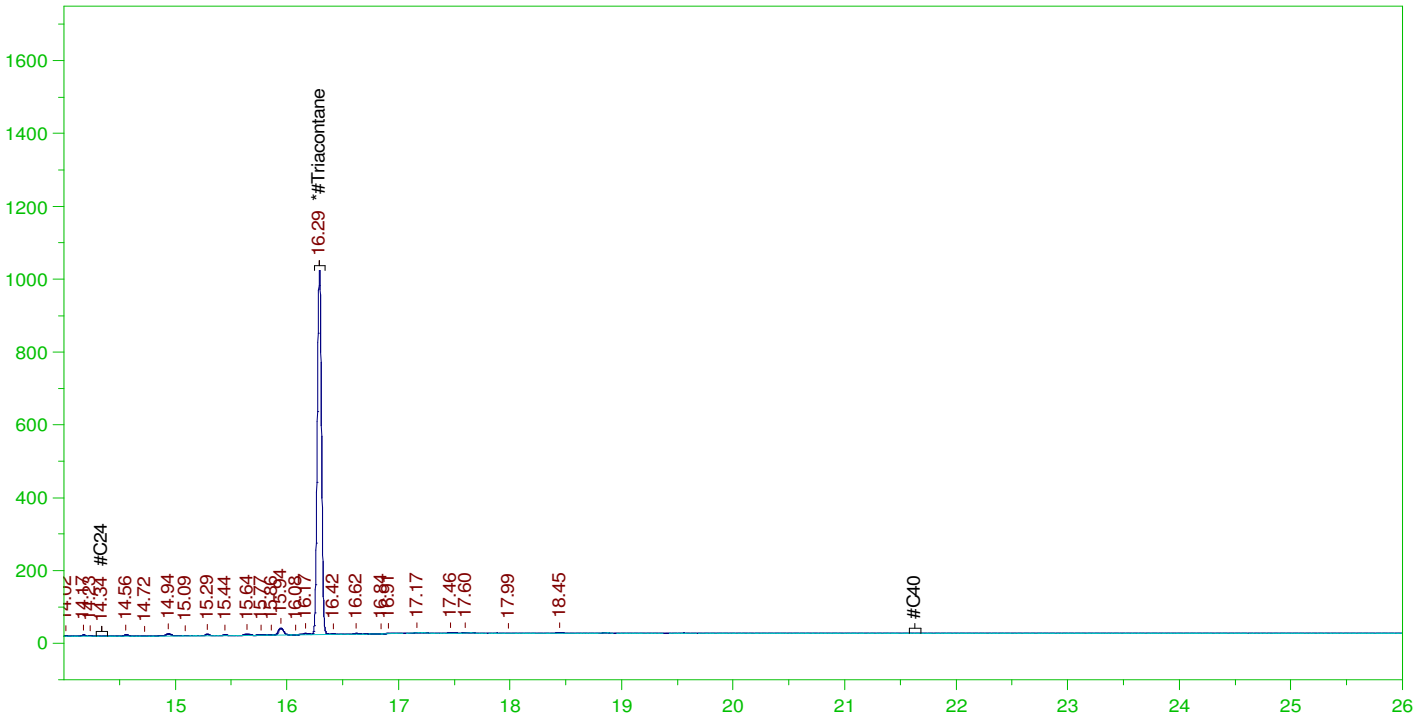
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.234	.19	.178	93.68	-
*1-Chlorooctadecane	29.988	.19	.	.	-
*#Triacontane	16.291	.19	.085	44.42	-

DRO Area:965357.8 DRO Amount: 2.813705E-02
TEH Area:1324470 TEH Amount: 0.038604

ERH2793 (OWDFMW01) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0011.RAW B22031470-006C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-006C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0011.RAW
Date & Time Acquired: 3/22/2022 3:24:26 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

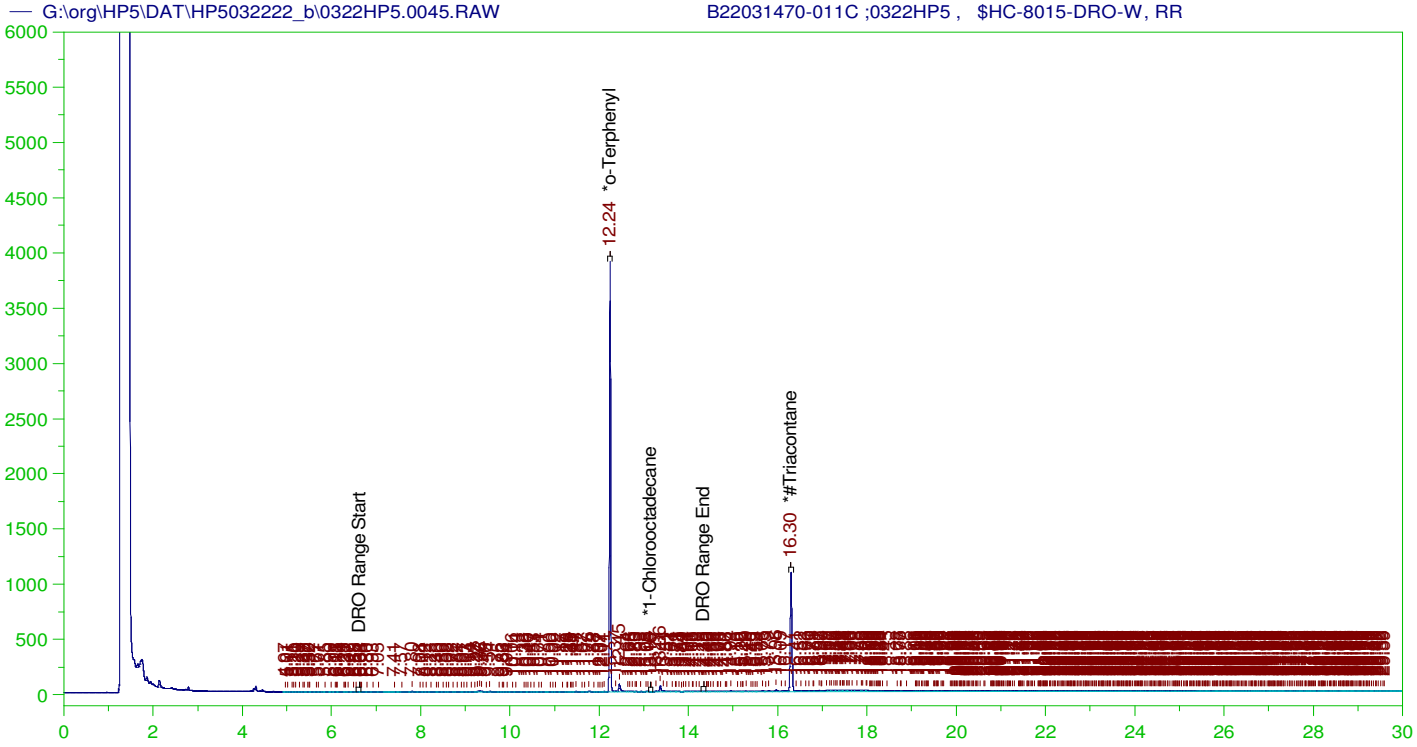
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.291	.476	.085	17.77	-

RRO Area:174524 RRO AMOUNT: 6.290111E-03

ERH2826 (RHMW08) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0045.RAW B22031470-011C ;0322HP5 , $HC-8015-DRO-W, RR



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-011C ;0322HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0045.RAW
Date & Time Acquired: 3/23/2022 3:39:48 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

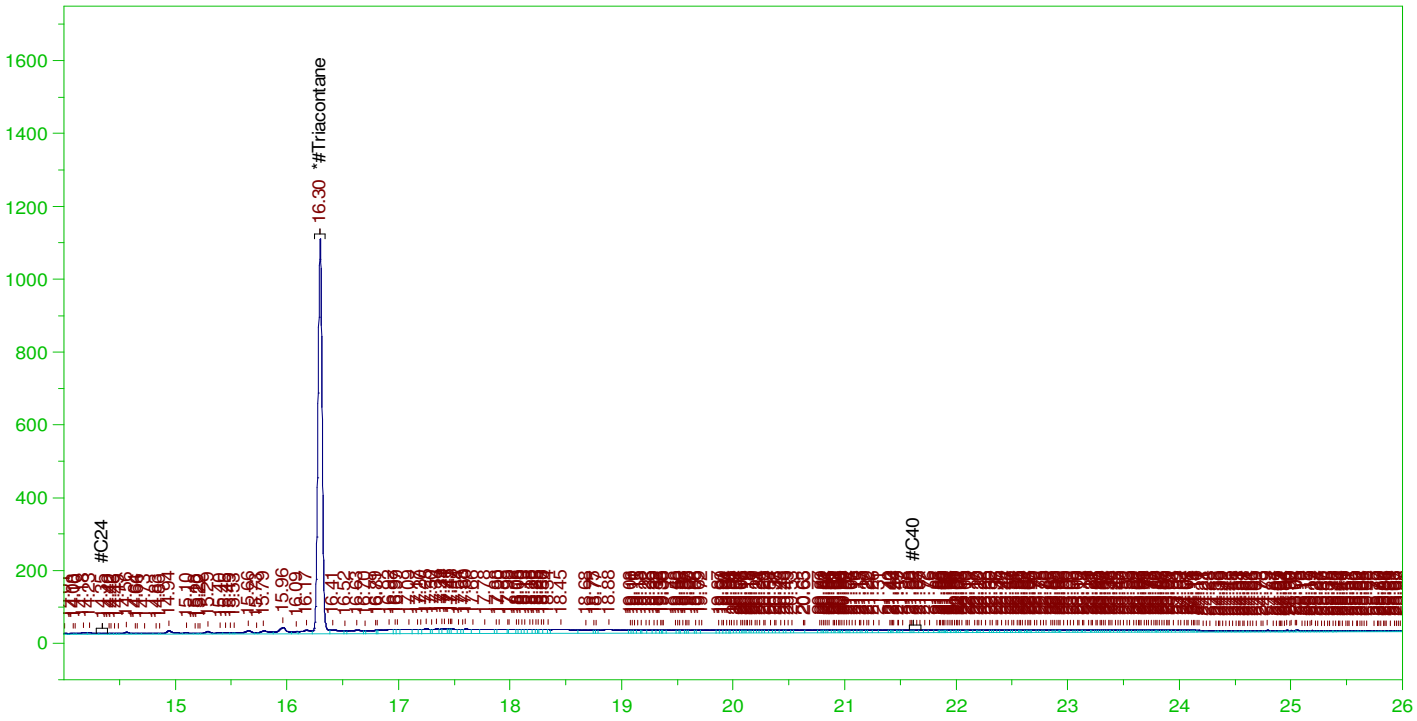
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.241	.19	.193	101.06	-
*1-Chlorooctadecane	13.15	.19	.	.02	-
*#Triacontane	16.298	.19	.092	48.23	-

DRO Area:1107187 DRO Amount: 3.227092E-02
TEH Area:5929386 TEH Amount: 0.1728224

ERH2826 (RHMW08) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0045.RAW B22031470-011C ;0322HP5 , $HC-8015-DRO-W, RR



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-011C ;0322HP5 , $HC-8015-DRO-W, RR
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0045.RAW
Date & Time Acquired: 3/23/2022 3:39:48 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

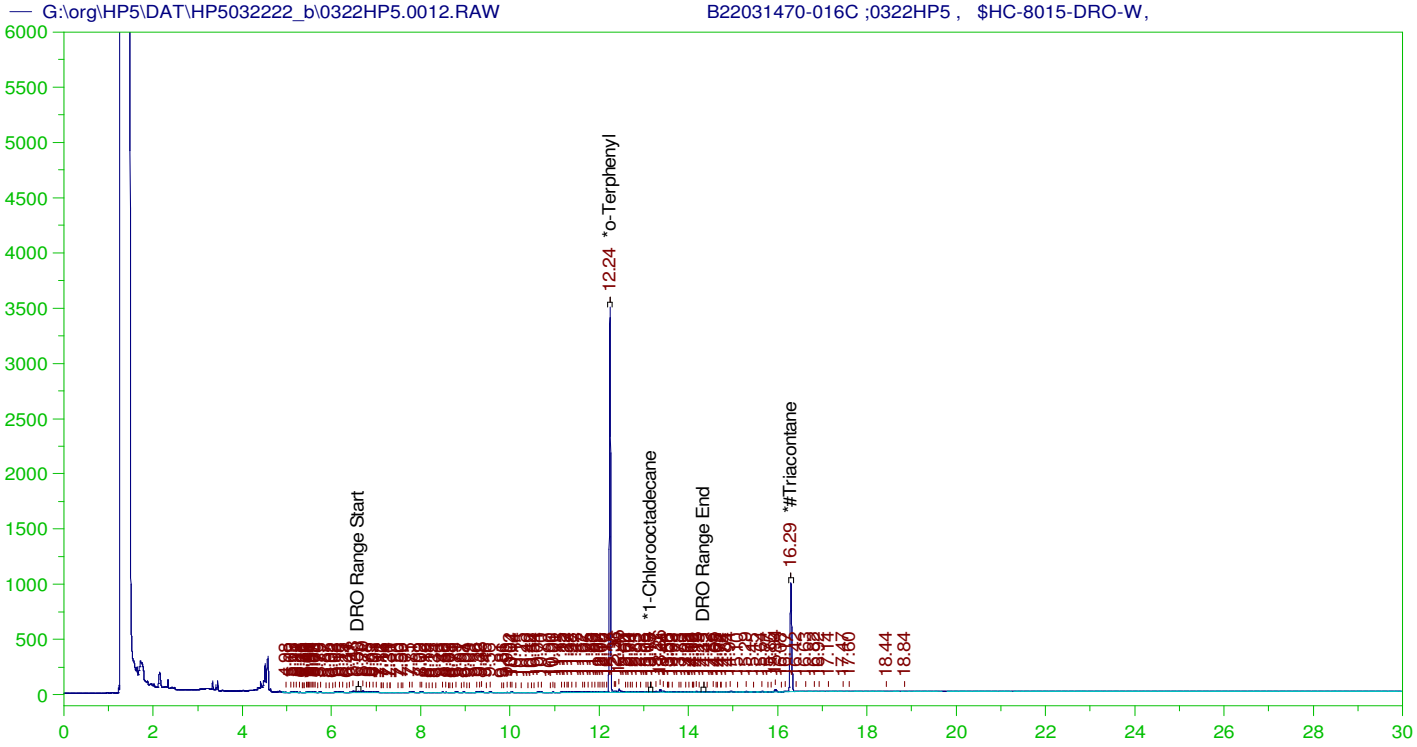
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.298	.476	.092	19.29	-

RRO Area:3242945 RRO AMOUNT: 0.1168806

ERH2783 (OWDFMW04A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0012.RAW B22031470-016C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-016C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0012.RAW
Date & Time Acquired: 3/22/2022 4:06:59 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

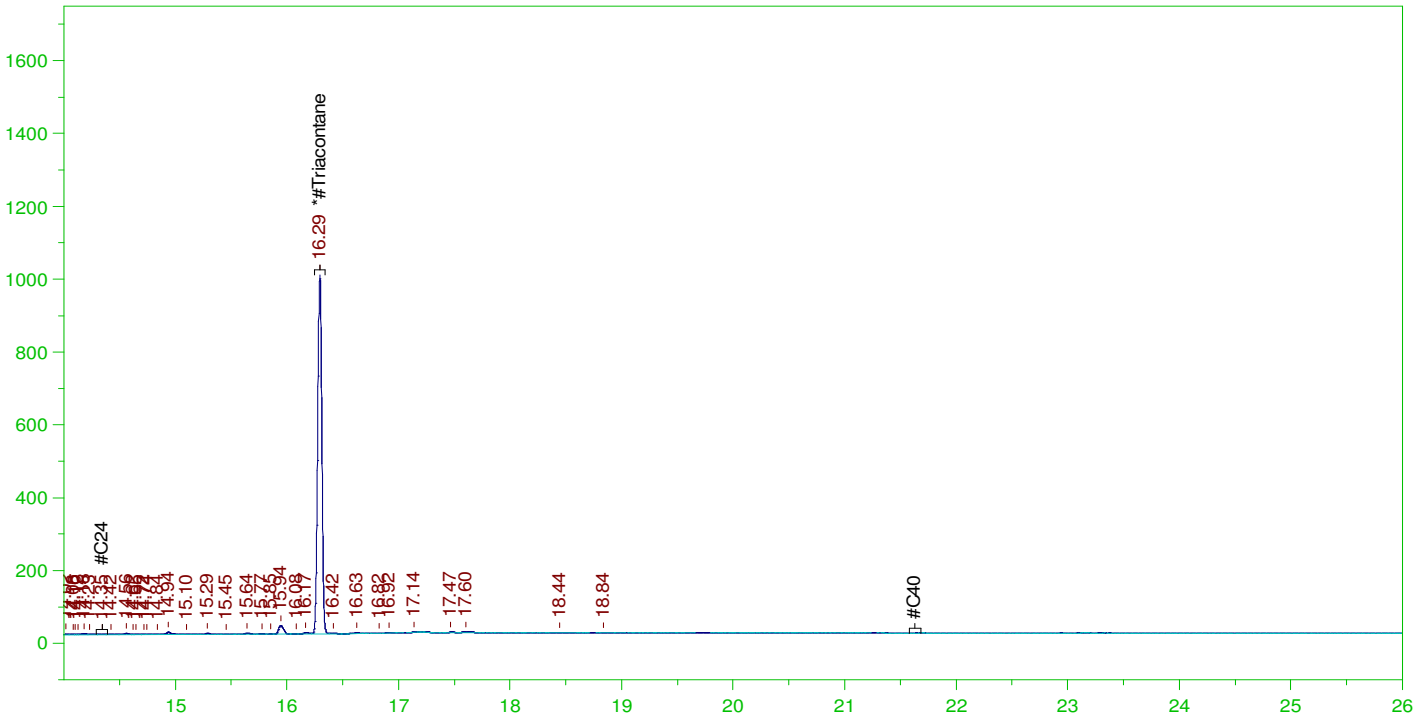
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.174	91.43	-
*1-Chlorooctadecane	13.152	.19	.	.03	-
*#Triacontane	16.294	.19	.082	43.13	-

DRO Area:933438.1 DRO Amount: 0.0272067
TEH Area:1316942 TEH Amount: 0.0383846

ERH2783 (OWDFMW04A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0012.RAW B22031470-016C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-016C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0012.RAW
Date & Time Acquired: 3/22/2022 4:06:59 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

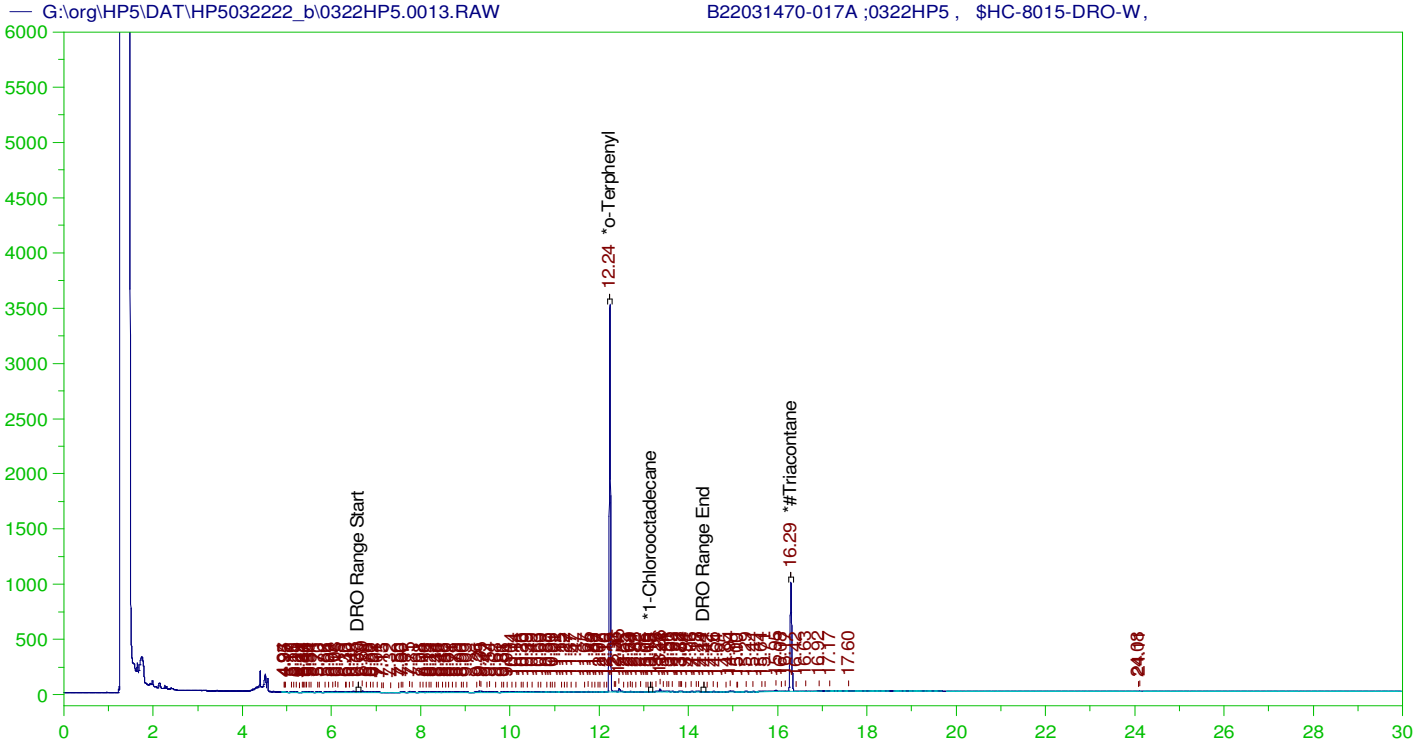
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.082	17.25	-

RRO Area:213716.3 RRO AMOUNT: 7.702657E-03

ERH2784 (OWDFMW04A FD) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0013.RAW B22031470-017A ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-017A ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0013.RAW
Date & Time Acquired: 3/22/2022 4:49:35 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

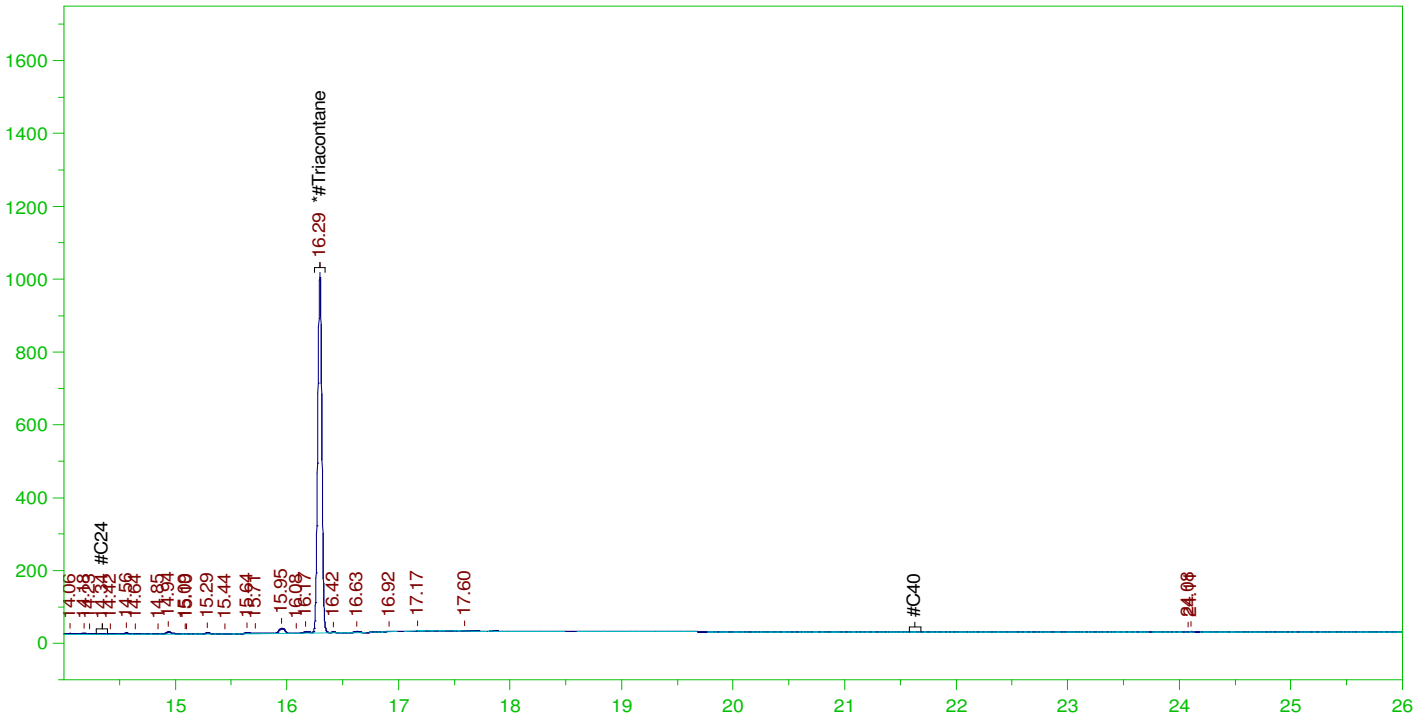
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.237	.19	.174	91.54	-
*1-Chlorooctadecane	13.154	.19	.	.03	-
*#Triacontane	16.294	.19	.082	43.04	-

DRO Area:855364.5 DRO Amount: 2.493111E-02
TEH Area:1207656 TEH Amount: 3.519925E-02

ERH2784 (OWDFMW04A FD) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0013.RAW B22031470-017A ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-017A ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0013.RAW
Date & Time Acquired: 3/22/2022 4:49:35 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

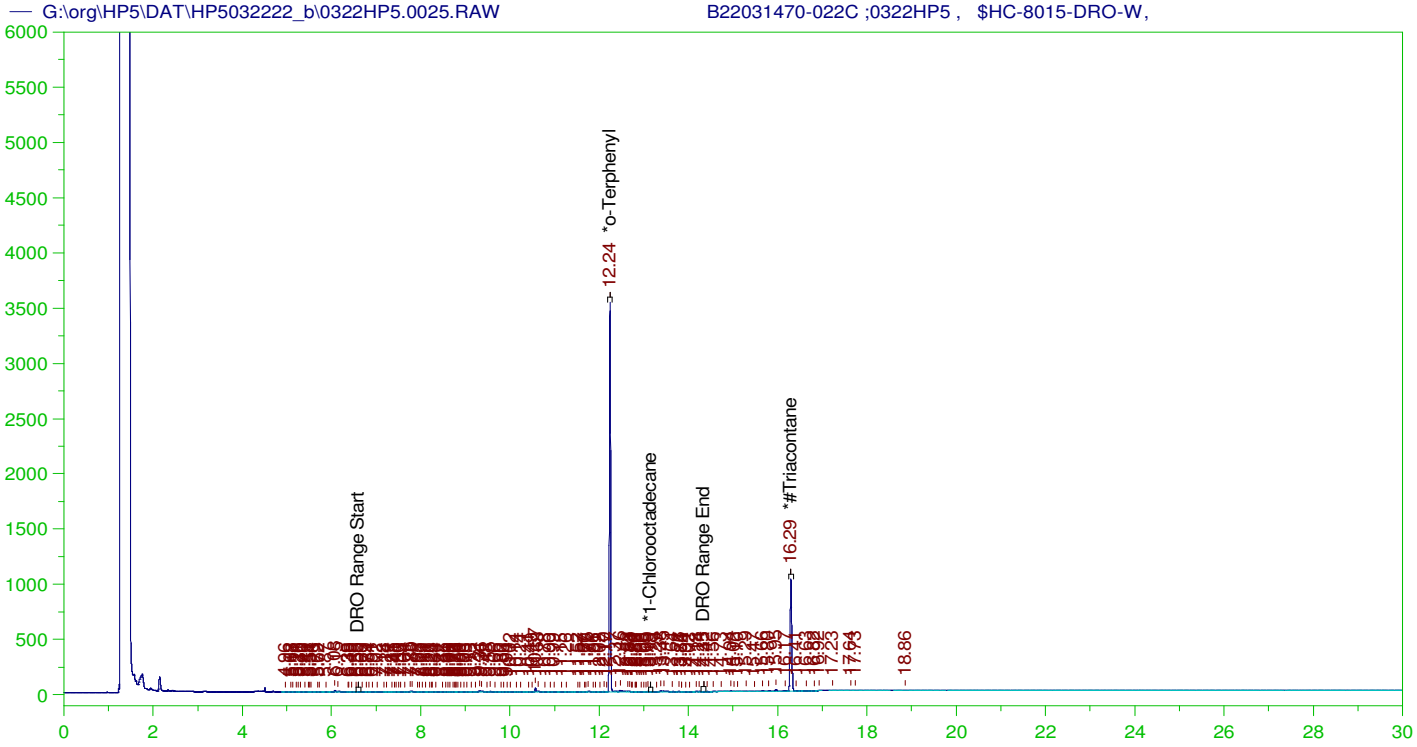
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.082	17.22	-

RRO Area:162680.3 RRO AMOUNT: 5.863243E-03

ERH2836 (RHMW13-05) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0025.RAW B22031470-022C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-022C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0025.RAW
Date & Time Acquired: 3/23/2022 1:22:23 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

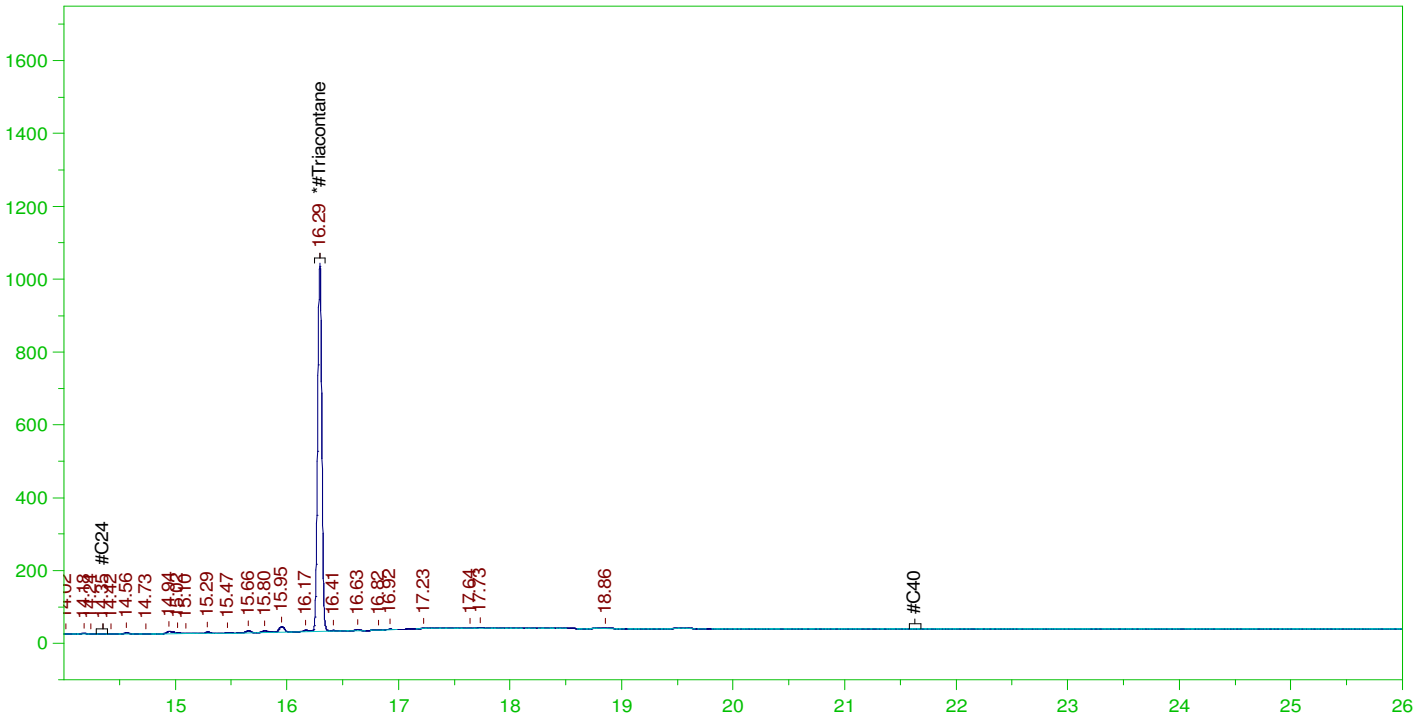
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.176	92.59	-
*1-Chlorooctadecane	13.15	.19	.	.01	-
*#Triacontane	16.294	.19	.085	44.53	-

DRO Area:660120.3 DRO Amount: 1.924037E-02
TEH Area:1011299 TEH Amount: 2.947609E-02

ERH2836 (RHMW13-05) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0025.RAW B22031470-022C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-022C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0025.RAW
Date & Time Acquired: 3/23/2022 1:22:23 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

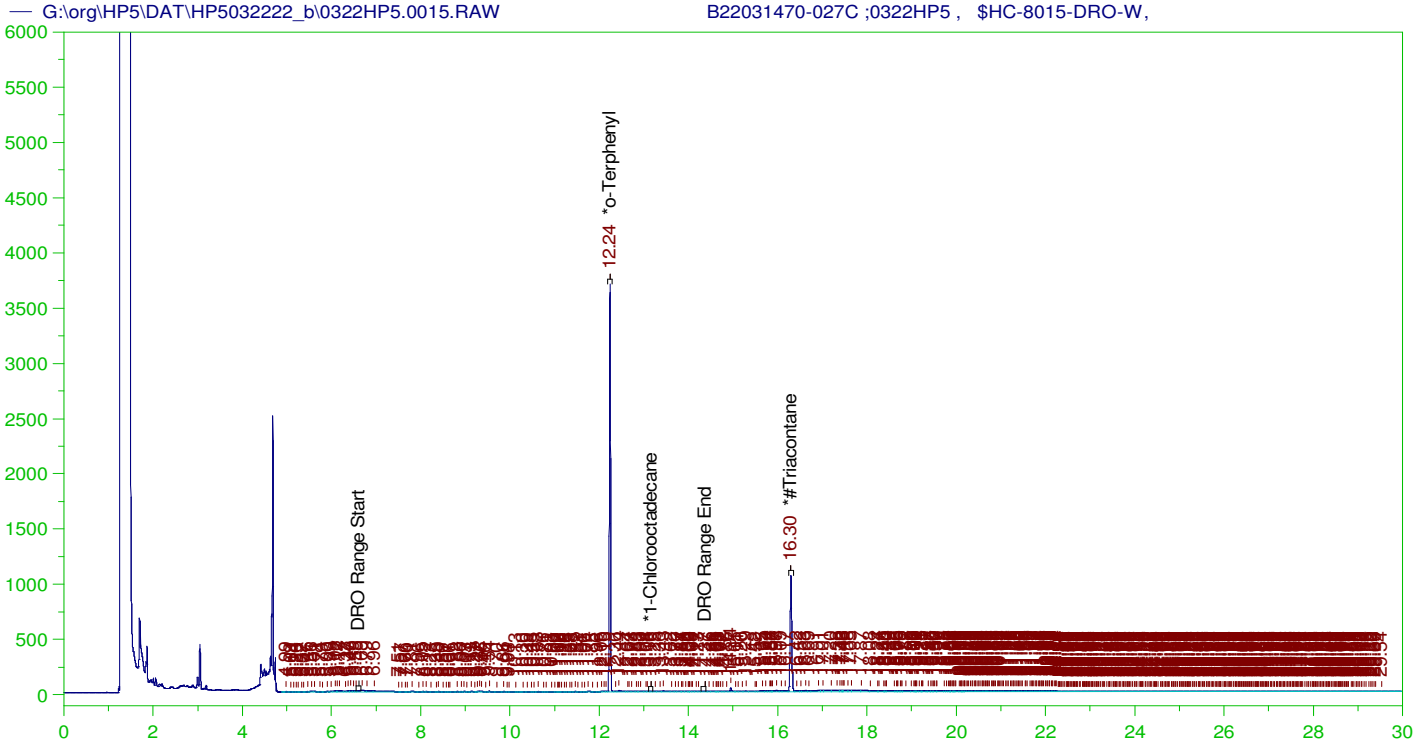
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.085	17.81	-

RRO Area:199180.7 RRO AMOUNT: 7.178775E-03

ERH2823 (OWDFMW07A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0015.RAW B22031470-027C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-027C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0015.RAW
Date & Time Acquired: 3/22/2022 6:14:29 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

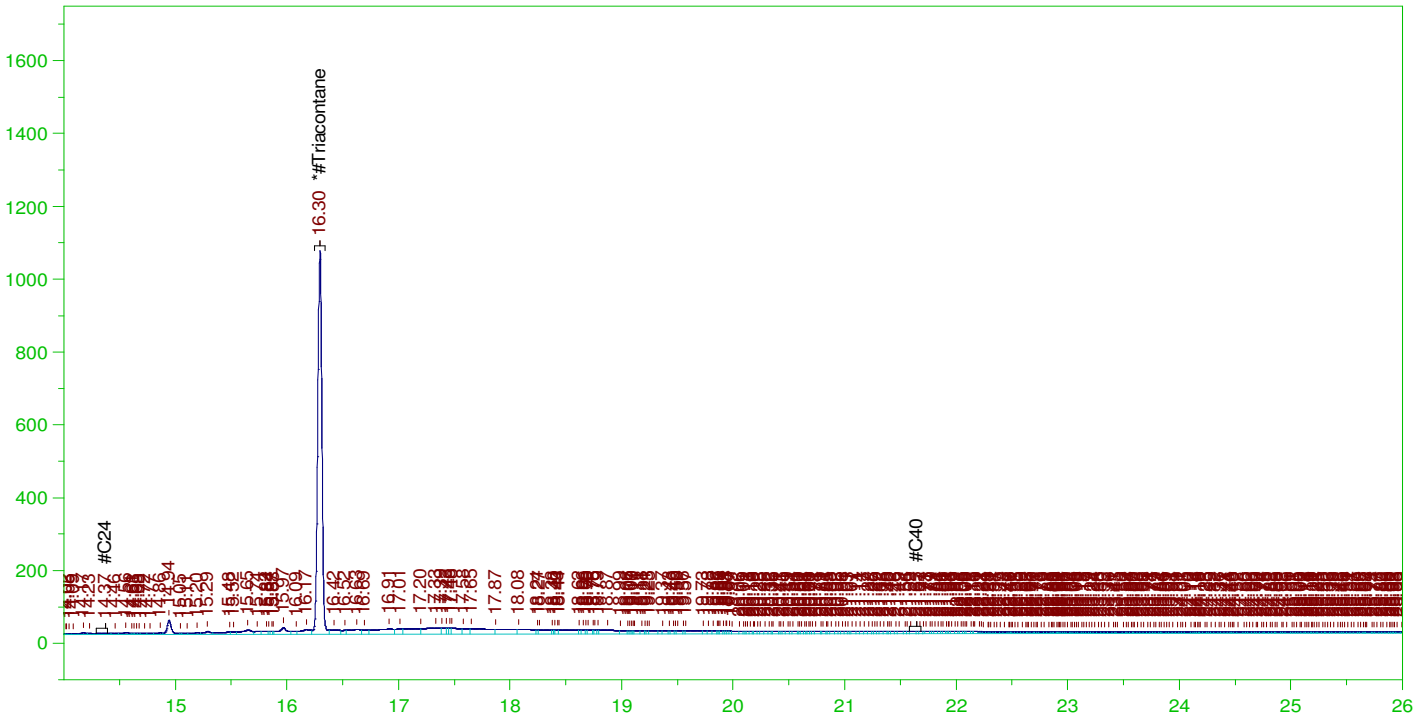
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.238	.19	.18	94.55	-
*1-Chlorooctadecane	13.159	.19	.	.12	-
*#Triacontane	16.295	.19	.088	46.44	-

DRO Area:1576711 DRO Amount: 4.595602E-02
TEH Area:7129837 TEH Amount: 0.2078117

ERH2823 (OWDFMW07A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0015.RAW B22031470-027C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-027C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0015.RAW
Date & Time Acquired: 3/22/2022 6:14:29 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

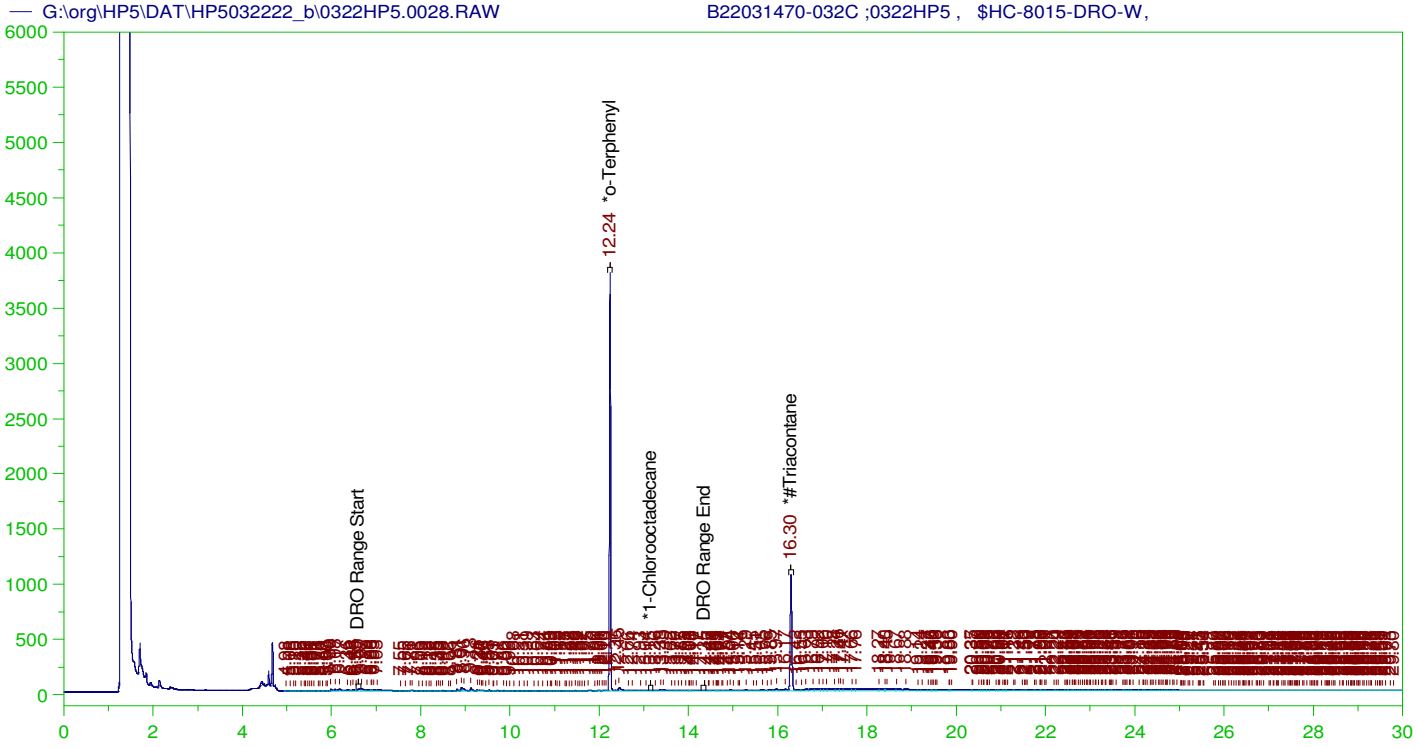
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	.476	.088	18.58	-

RRO Area:3797672 RRO AMOUNT: 0.1368738

ERH2841 (RHMW09) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0028.RAW B22031470-032C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-032C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0028.RAW
Date & Time Acquired: 3/23/2022 3:30:35 AM
Method File: G:\Org\HP5\Methods\DR_8015-032218-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

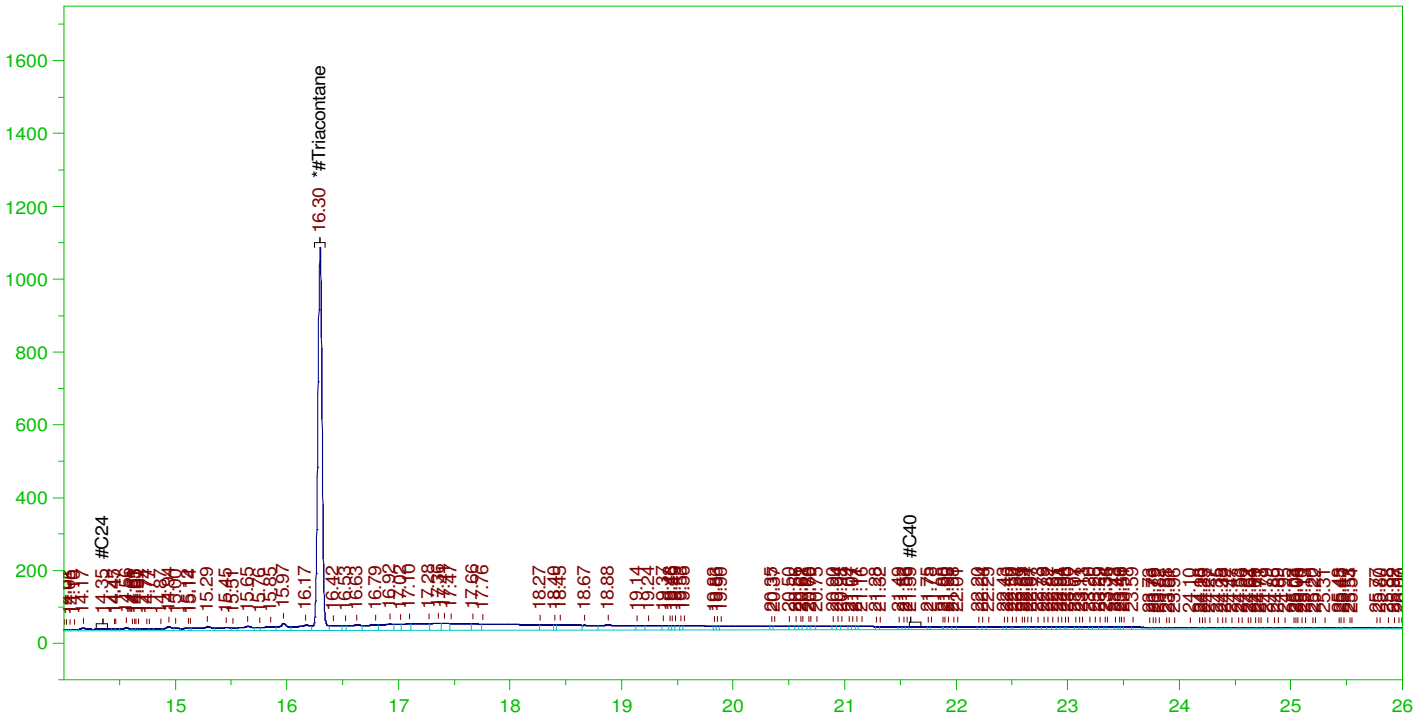
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.24	.19	.188	98.47	-
*1-Chlorooctadecane	13.15	.19	.	.22	-
*#Triacontane	16.297	.19	.09	47.26	-

DRO Area:2412201 DRO Amount: 7.030784E-02
TEH Area:9183594 TEH Amount: 0.267672

ERH2841 (RHMW09) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0028.RAW B22031470-032C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-032C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0028.RAW
Date & Time Acquired: 3/23/2022 3:30:35 AM
Method File: G:\Org\HP5\Methods\D3_OROS-032218-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

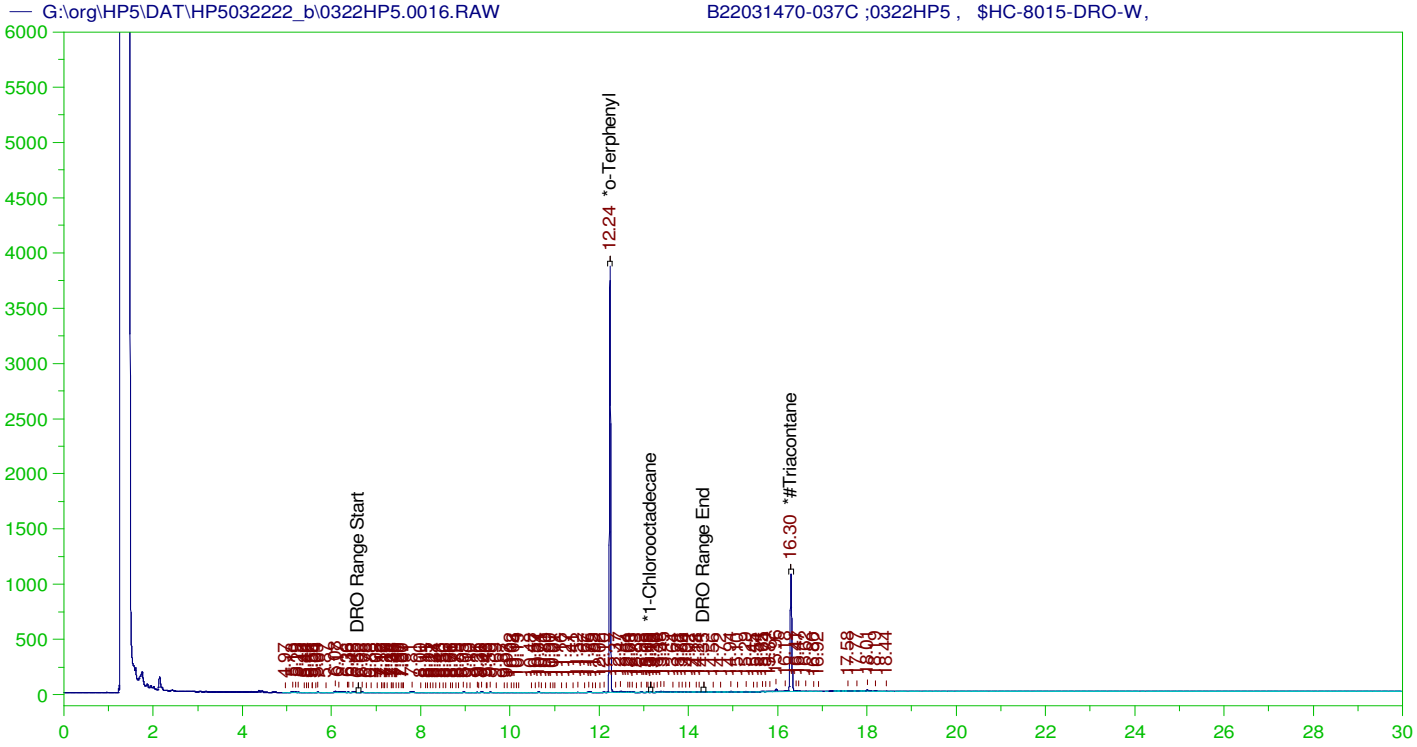
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.297	.476	.09	18.91	-

RRO Area:4715548 RRO AMOUNT: 0.1699555

ERH2788 (OWDFMW08A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0016.RAW B22031470-037C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-037C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0016.RAW
Date & Time Acquired: 3/22/2022 6:56:54 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

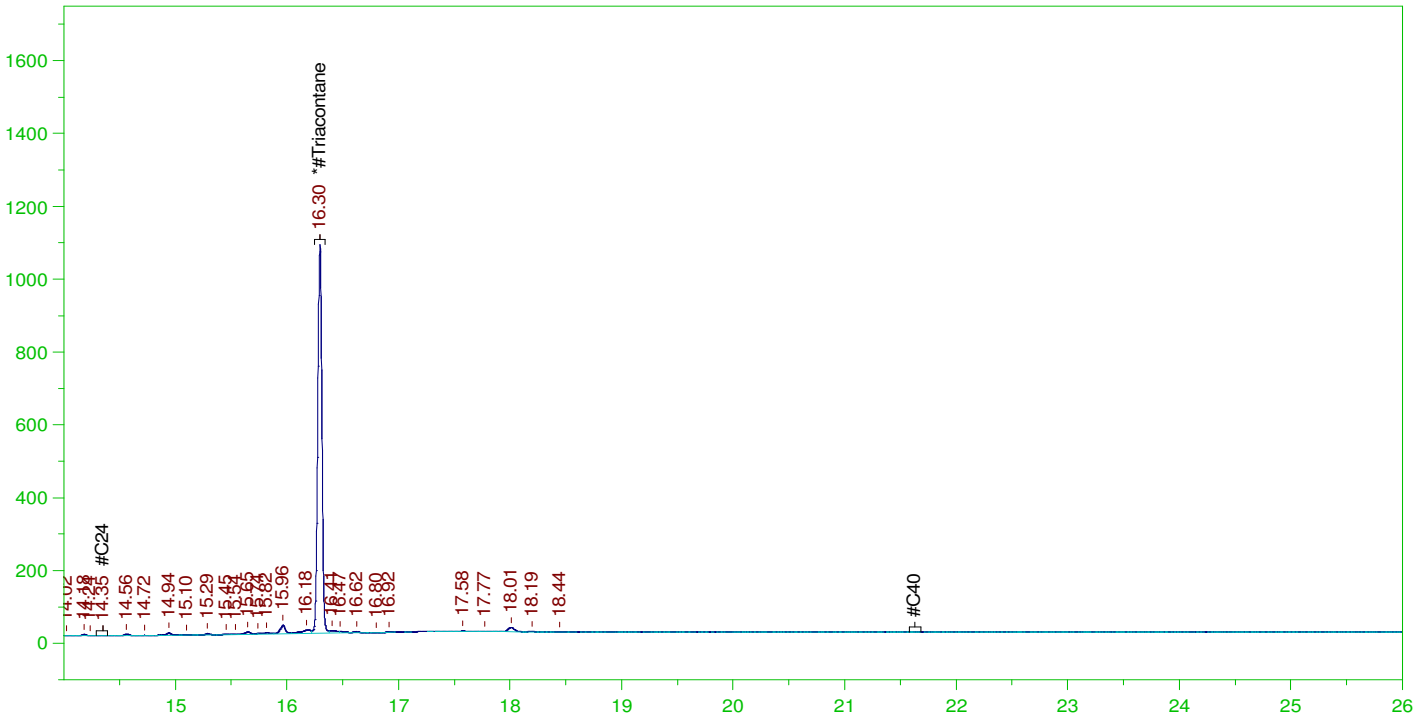
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.19	99.69	-
*1-Chlorooctadecane	13.147	.19	.	.01	-
*#Triacontane	16.295	.19	.089	46.88	-

DRO Area:438615.8 DRO Amount: 1.278423E-02
TEH Area:948612.6 TEH Amount: 2.764899E-02

ERH2788 (OWDFMW08A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0016.RAW B22031470-037C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-037C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0016.RAW
Date & Time Acquired: 3/22/2022 6:56:54 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

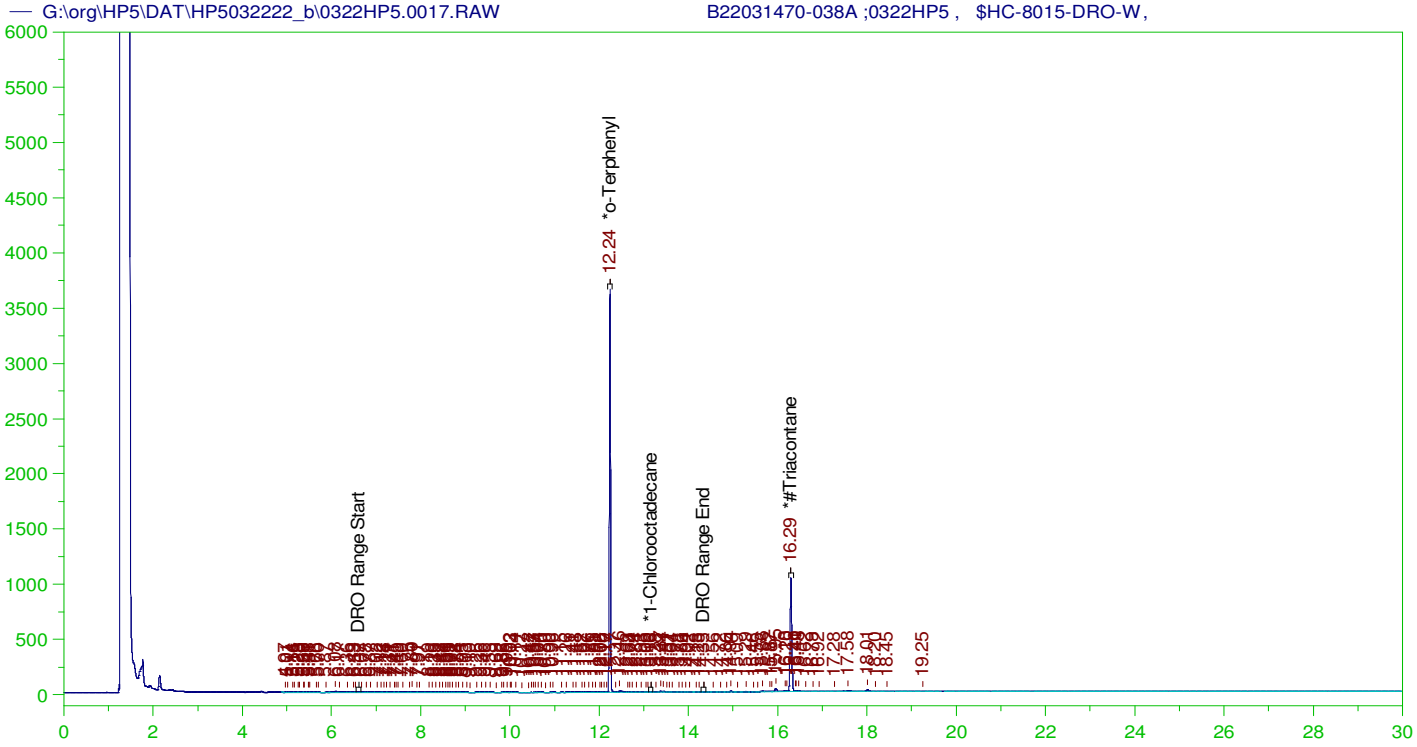
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	.476	.089	18.75	-

RRO Area:334638.1 RRO AMOUNT: 1.206086E-02

ERH2789 (OWDFMW08A FD) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0017.RAW B22031470-038A ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-038A ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0017.RAW
Date & Time Acquired: 3/22/2022 7:39:23 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

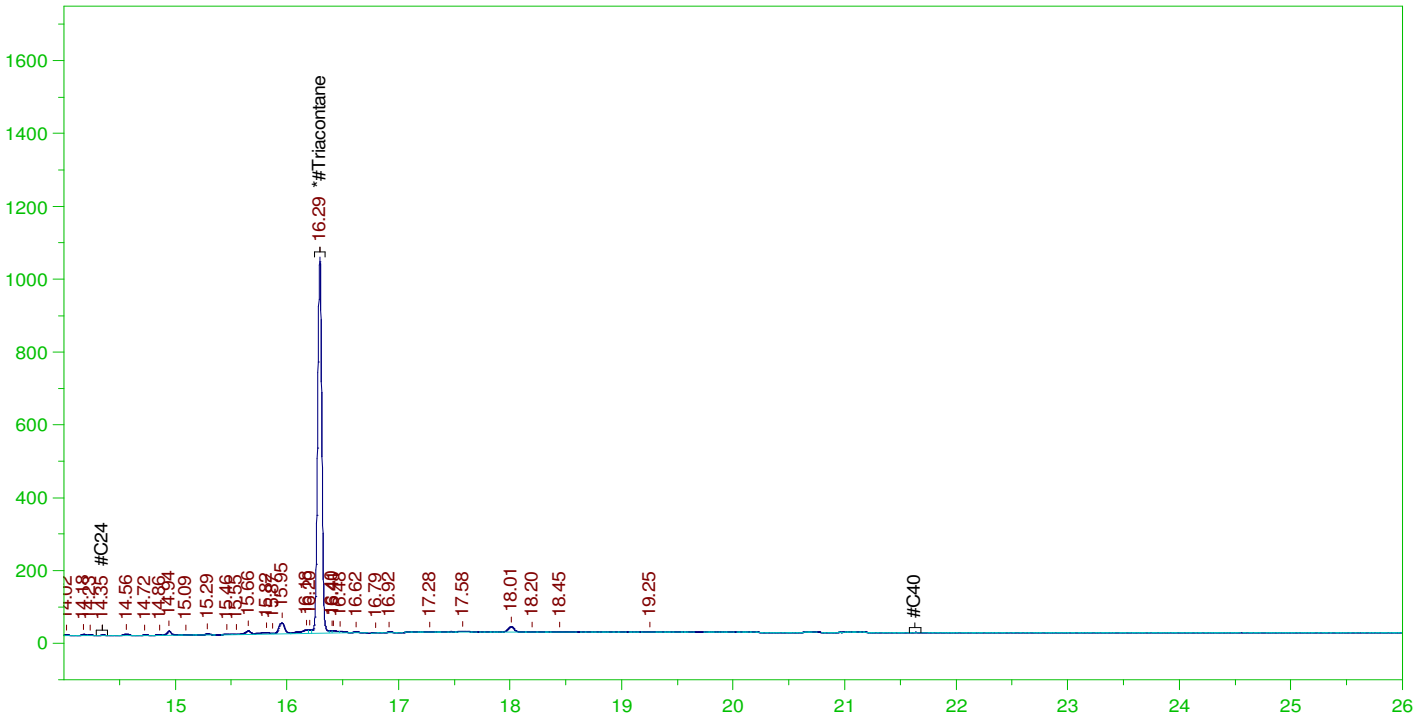
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.238	.19	.18	94.64	-
*1-Chlorooctadecane	13.16	.19	.	.04	-
*#Triacontane	16.294	.19	.087	45.53	-

DRO Area:647565.1 DRO Amount: 1.887443E-02
TEH Area:1240075 TEH Amount: 3.614417E-02

ERH2789 (OWDFMW08A FD) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0017.RAW B22031470-038A ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-038A ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0017.RAW
Date & Time Acquired: 3/22/2022 7:39:23 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

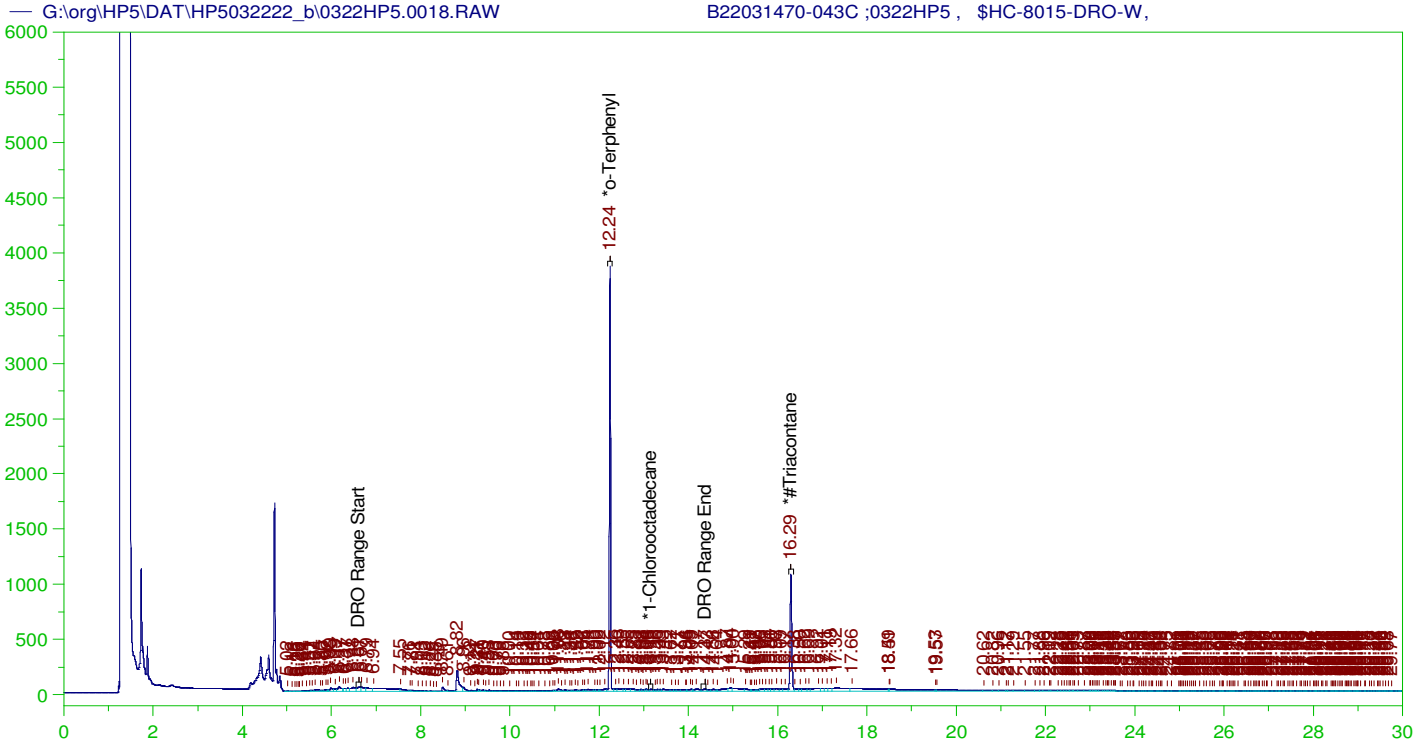
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.087	18.21	-

RRO Area:429958.6 RRO AMOUNT: 1.549636E-02

ERH2830 (OWDFMW05A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0018.RAW B22031470-043C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-043C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0018.RAW
Date & Time Acquired: 3/22/2022 8:22:18 PM
Method File: G:\Org\HP5\Methods\DR_8015-032218-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

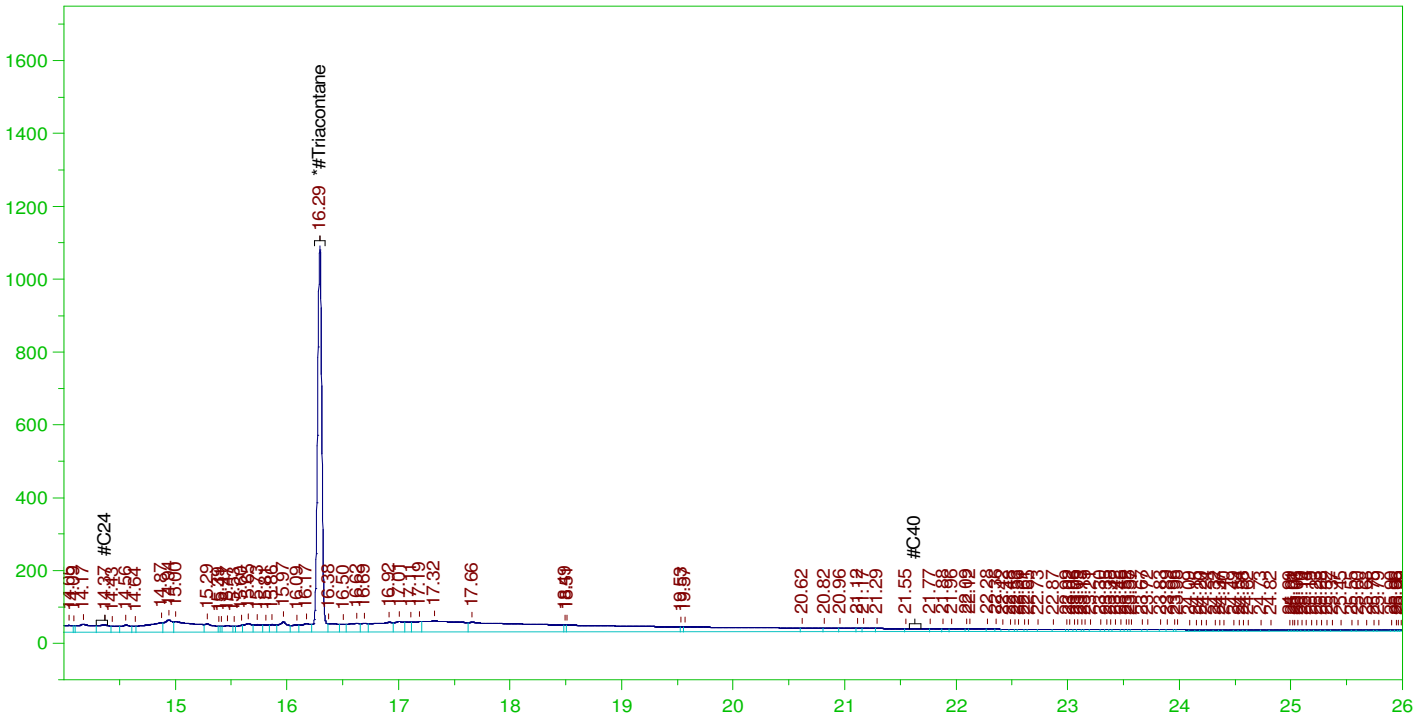
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.189	99.38	-
*1-Chlorooctadecane	13.154	.19	.003	1.43	-
*#Triacontane	16.294	.19	.092	48.25	-

DRO Area:7371667 DRO Amount: 0.2148602
TEH Area:1.810813E+07 TEH Amount: 0.5277935

ERH2830 (OWDFMW05A) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0018.RAW B22031470-043C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-043C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0018.RAW
Date & Time Acquired: 3/22/2022 8:22:18 PM
Method File: G:\Org\HP5\Methods\D3_OROS-032218-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

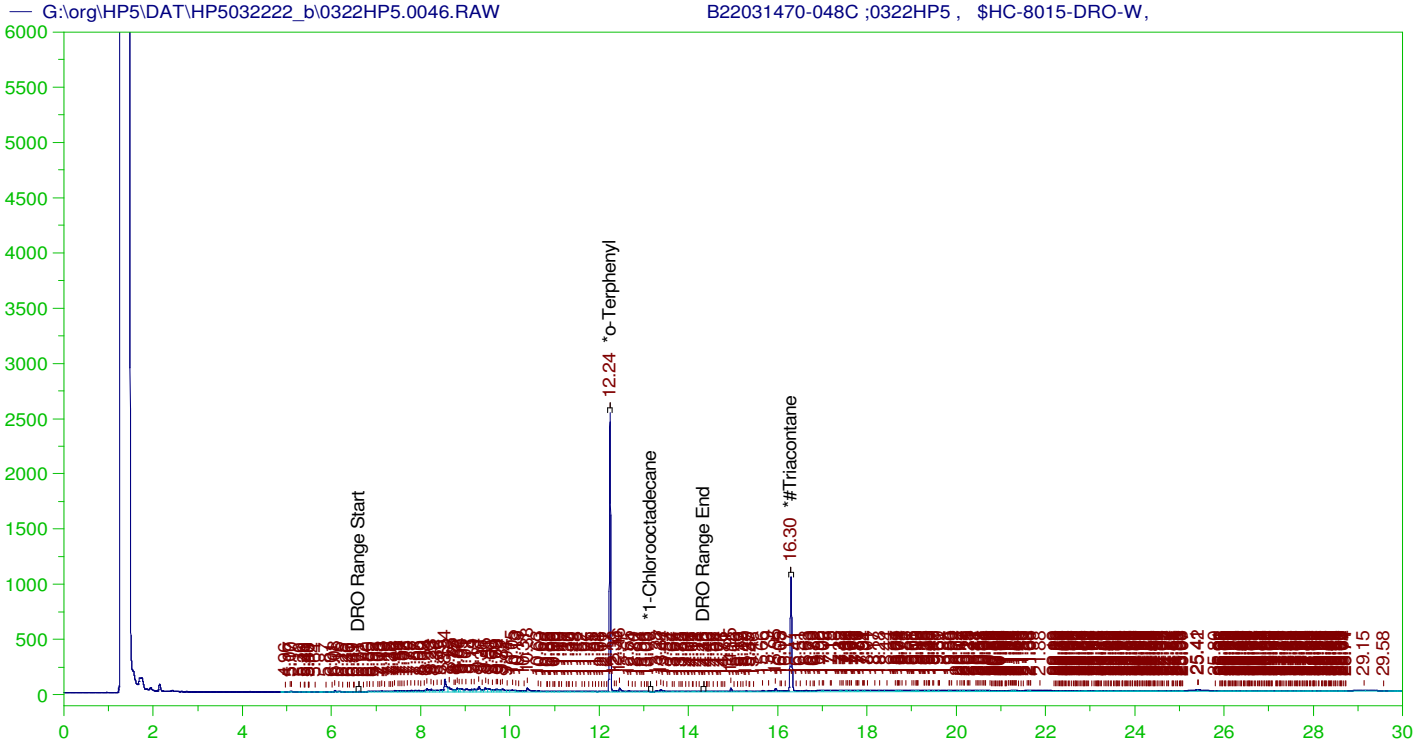
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.092	19.3	-

RRO Area:7877365 RRO AMOUNT: 0.2839122

ERH2844 (RHMW2254-01 B) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0046.RAW B22031470-048C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-048C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0046.RAW
Date & Time Acquired: 3/23/2022 4:22:36 PM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

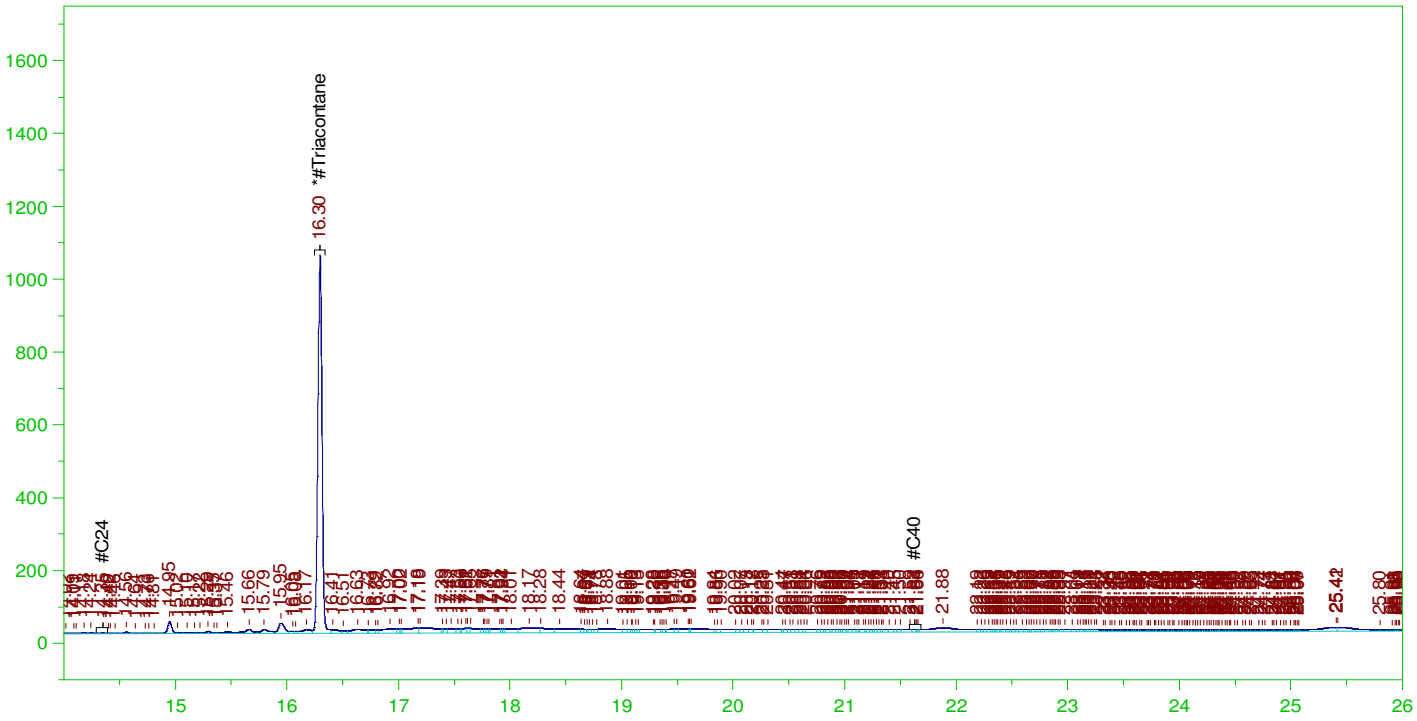
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.194	.129	66.37	-
*1-Chlorooctadecane	29.986	.194	.	.	-
*#Triacontane	16.296	.194	.088	45.44	-

DRO Area:4890656 DRO Amount: 0.1453147
TEH Area:1.009756E+07 TEH Amount: 0.3000261

ERH2844 (RHMW2254-01 B) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0046.RAW B22031470-048C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-048C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0046.RAW
Date & Time Acquired: 3/23/2022 4:22:36 PM
Method File: G:\Org\HP5\Methods\D3_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

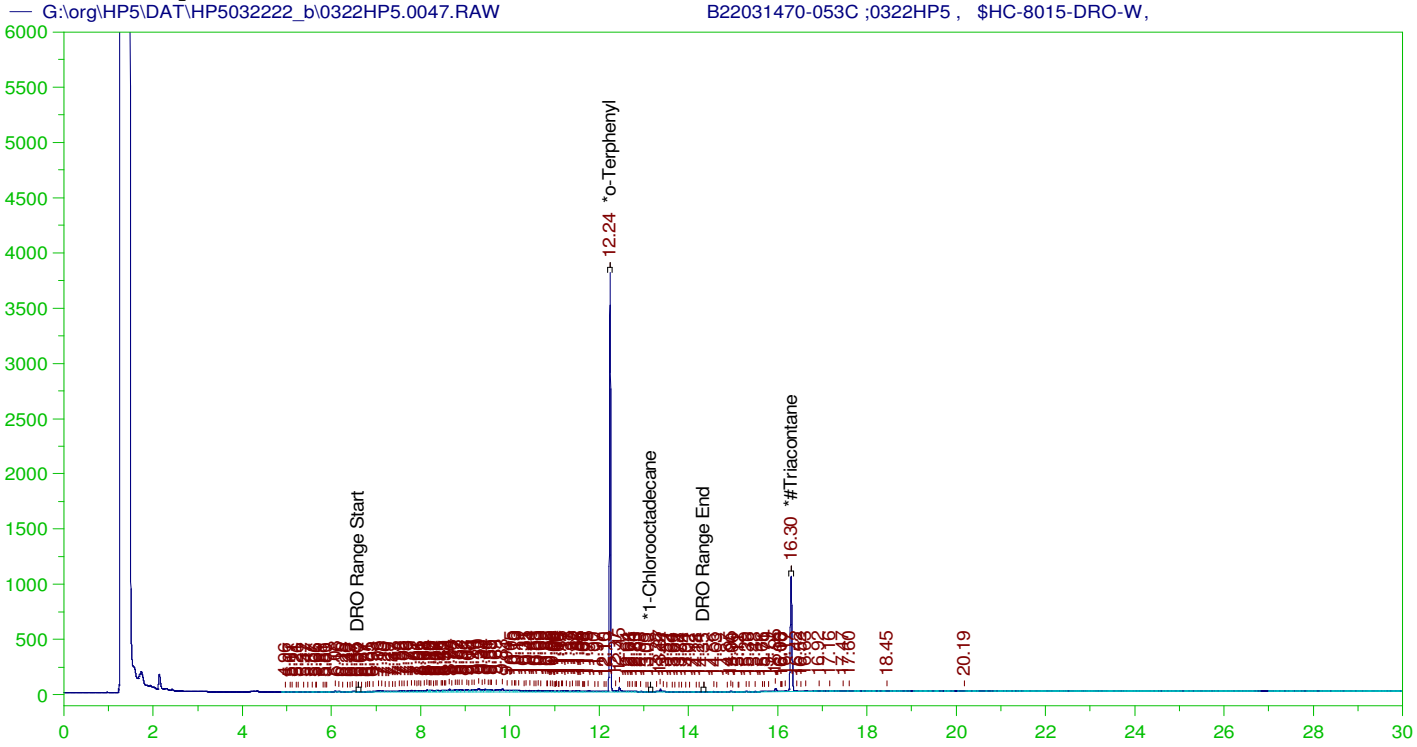
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.296	.485	.088	18.18	-

RRO Area:3344848 RRO AMOUNT: 0.1228942

ERH2850 (Sump Adit 3) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0047.RAW B22031470-053C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-053C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0047.RAW
Date & Time Acquired: 3/23/2022 5:05:24 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

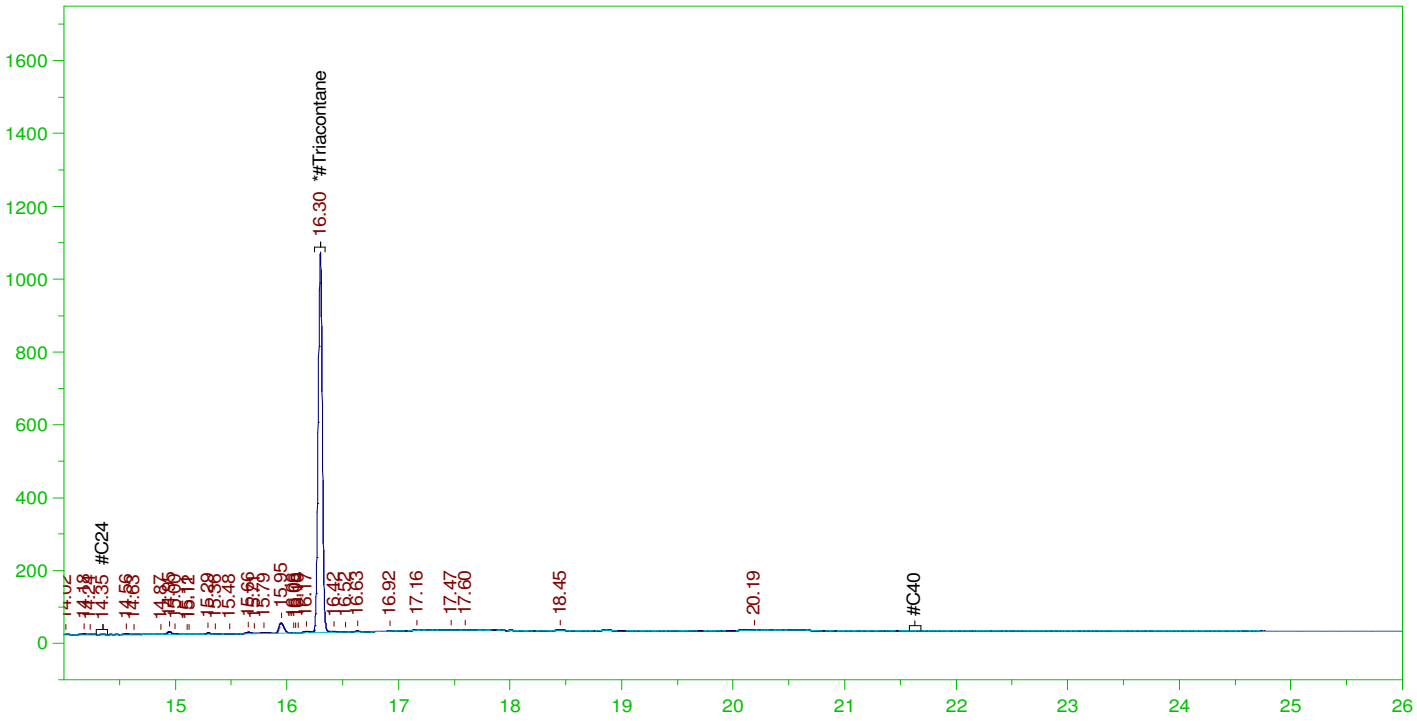
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.241	.192	.191	99.36	-
*1-Chlorooctadecane	29.994	.192	.	.	-
*#Triacontane	16.299	.192	.088	45.56	-

DRO Area:4947679 DRO Amount: 0.1455954
TEH Area:5385353 TEH Amount: 0.1584749

ERH2850 (Sump Adit 3) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0047.RAW B22031470-053C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-053C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0047.RAW
Date & Time Acquired: 3/23/2022 5:05:24 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

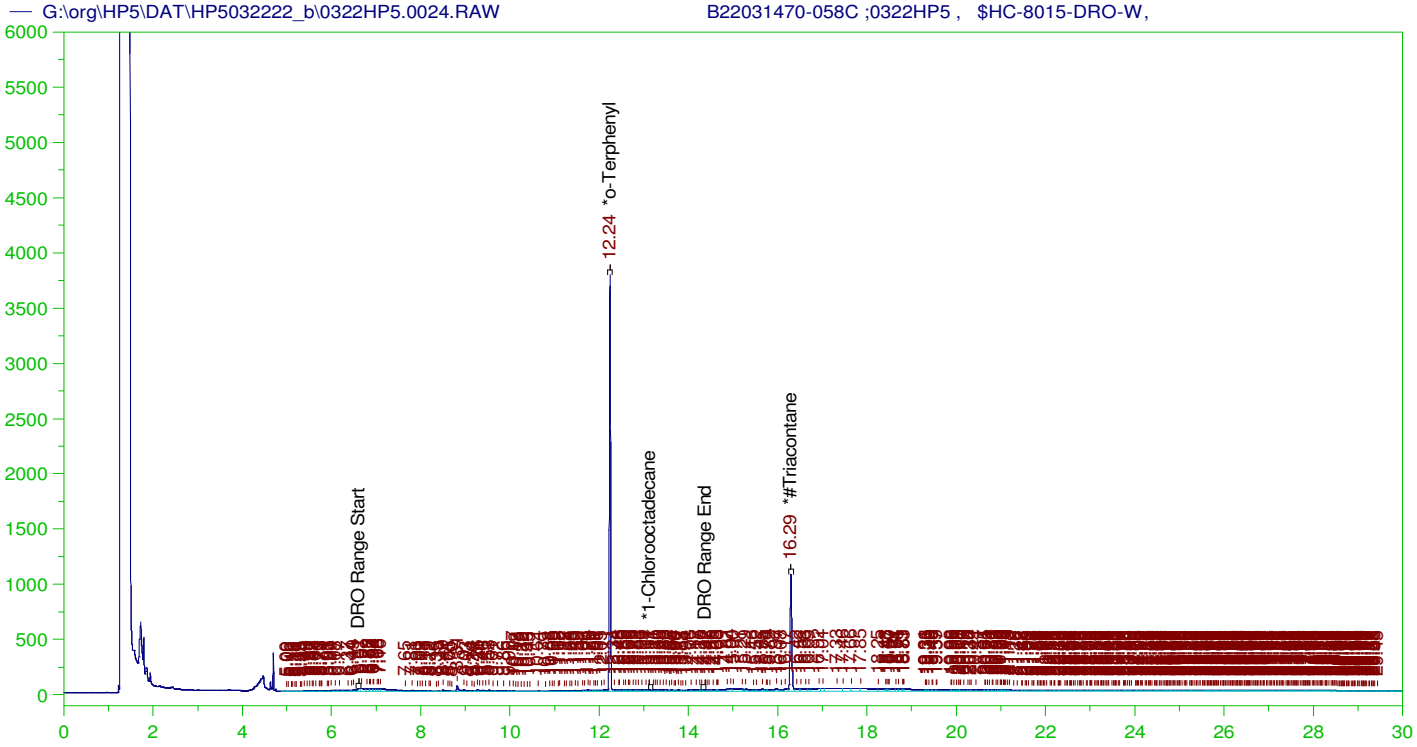
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.299	.481	.088	18.22	-

RRO Area:225851.5 RRO AMOUNT: 8.218299E-03

ERH2847 (RHMW2254-01 LF) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0024.RAW B22031470-058C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-058C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0024.RAW
Date & Time Acquired: 3/23/2022 12:39:39 AM
Method File: G:\Org\HP5\Methods\D3_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

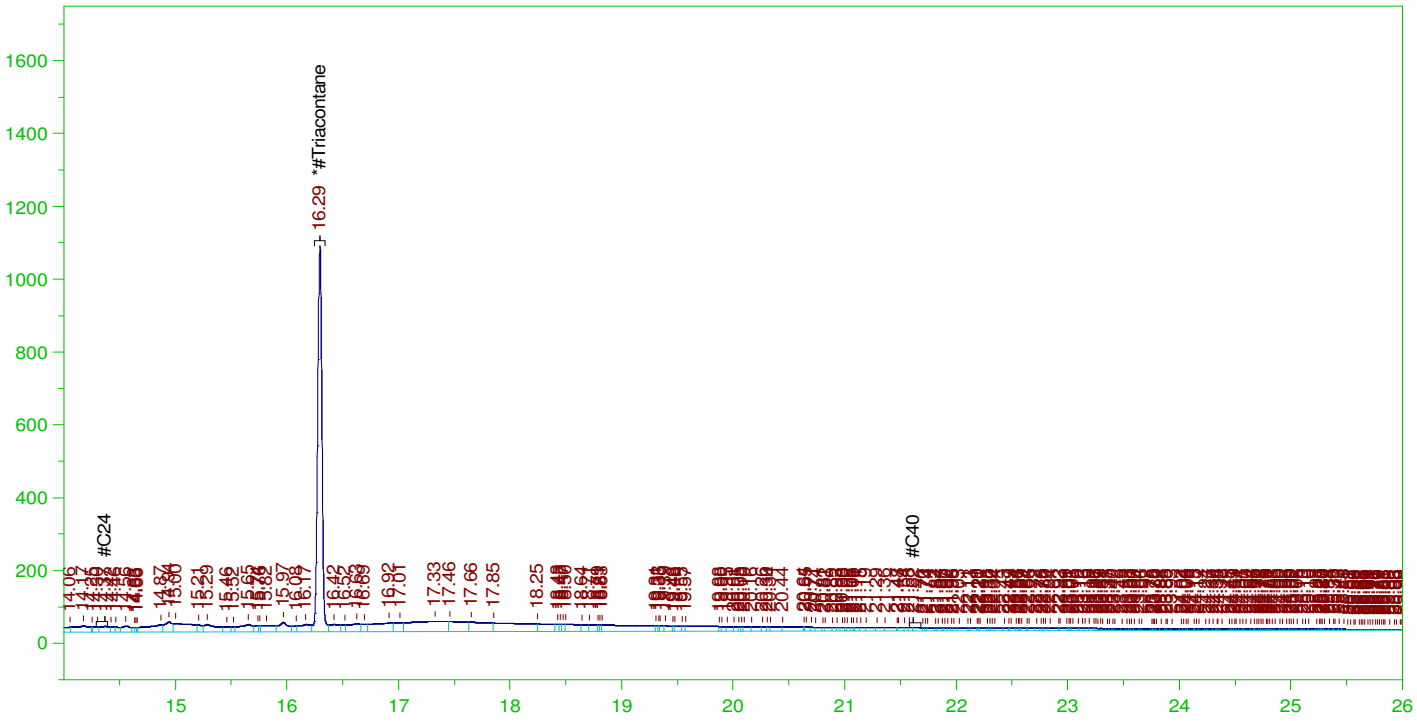
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.239	.19	.187	98.21	-
*1-Chlorooctadecane	13.114	.19	.002	.88	-
*#Triacontane	16.295	.19	.092	48.06	-

DRO Area:4357451 DRO Amount: 0.1270056
TEH Area:1.356918E+07 TEH Amount: 0.3954976

ERH2847 (RHMW2254-01 LF) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0024.RAW B22031470-058C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-058C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0024.RAW
Date & Time Acquired: 3/23/2022 12:39:39 AM
Method File: G:\Org\HP5\Methods\D3_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

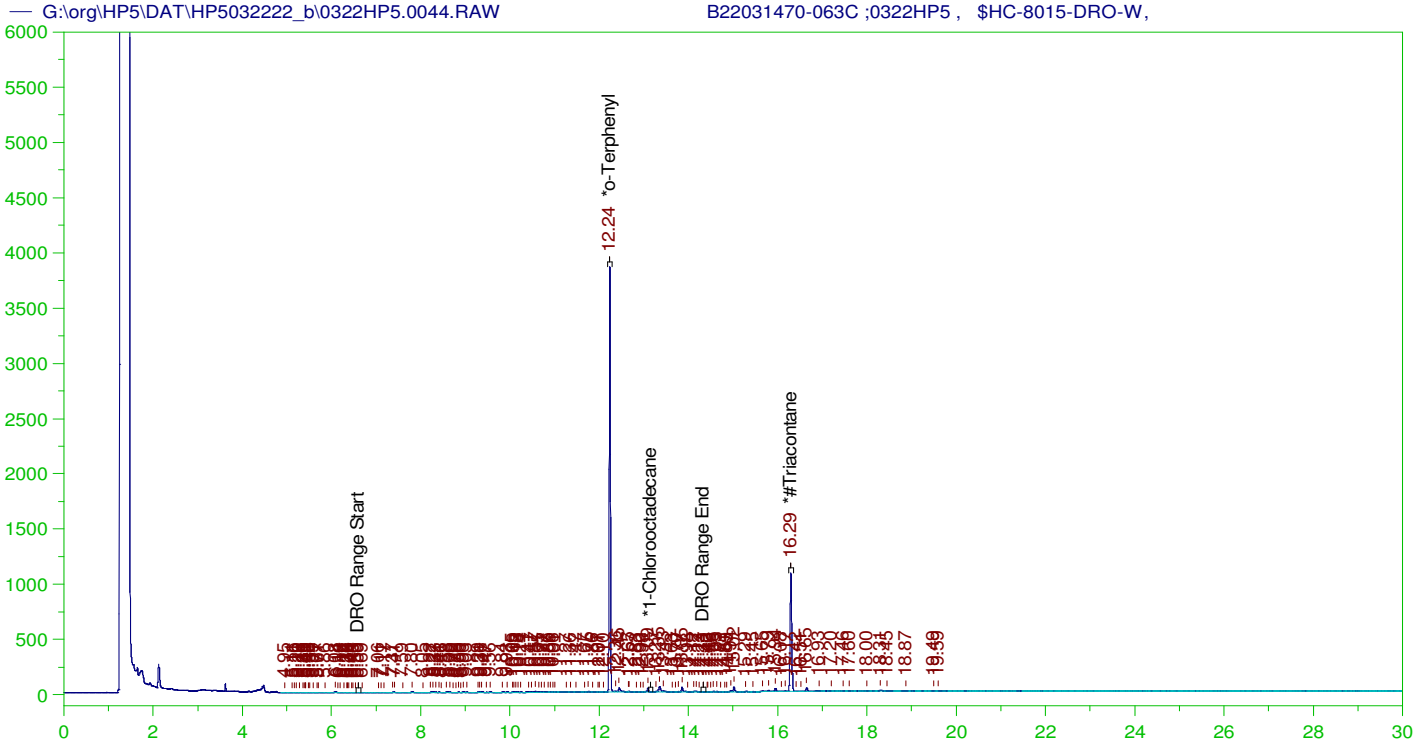
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.295	.476	.092	19.23	-

RRO Area:7088820 RRO AMOUNT: 0.2554918

ERH2853 (RHMW11-5) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0044.RAW B22031470-063C ;0322HP5 , $HC-8015-DRO-W,



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-063C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0044.RAW
Date & Time Acquired: 3/23/2022 2:56:58 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

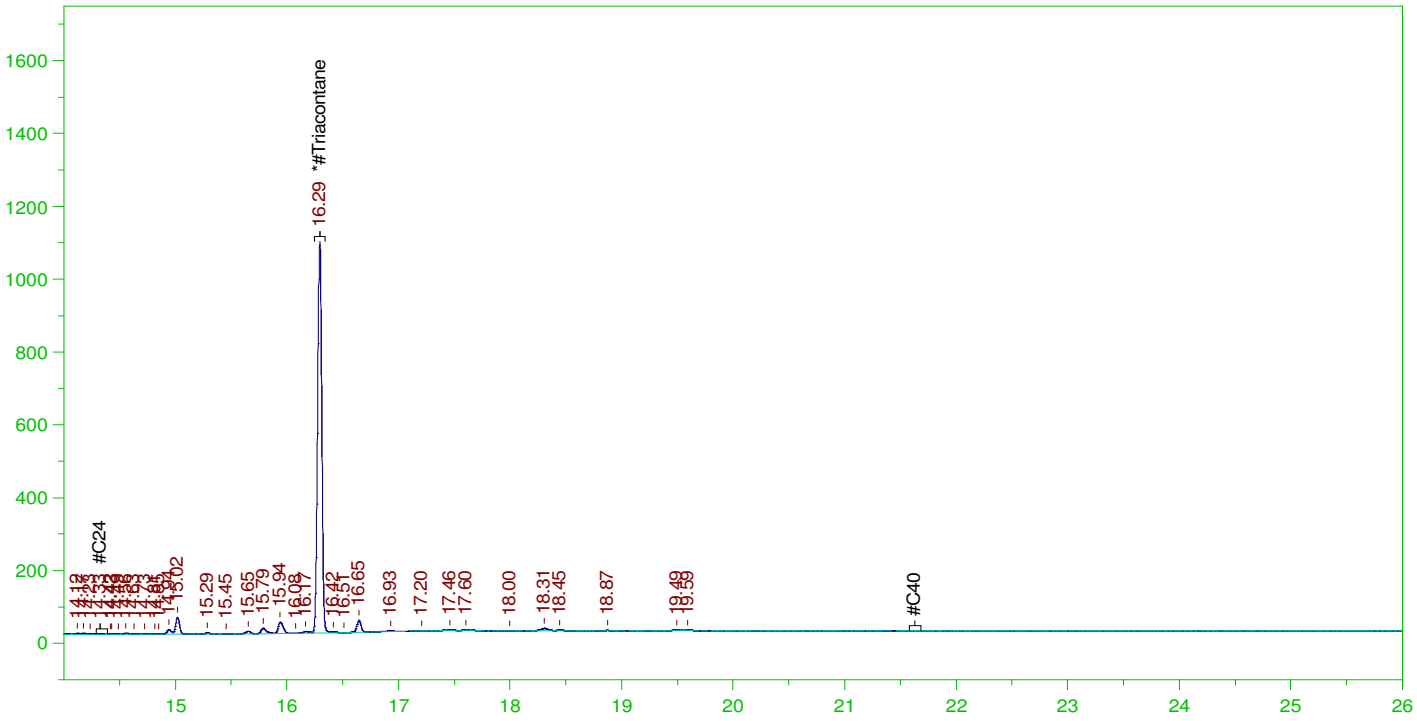
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.235	.19	.191	100.02	-
*1-Chlorooctadecane	29.991	.19	.	.	-
*#Triacontane	16.294	.19	.09	47.25	-

DRO Area:1084439 DRO Amount: 3.160788E-02
TEH Area:1672642 TEH Amount: 4.875211E-02

ERH2853 (RHMW11-5) Batch ID: 164697

G:\org\HP5\DAT\HP5032222_b\0322HP5.0044.RAW B22031470-063C ;0322HP5 , $HC-8015-DRO-W,



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-063C ;0322HP5 , $HC-8015-DRO-W,
Raw File: G:\org\HP5\DAT\HP5032222_b\0322HP5.0044.RAW
Date & Time Acquired: 3/23/2022 2:56:58 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

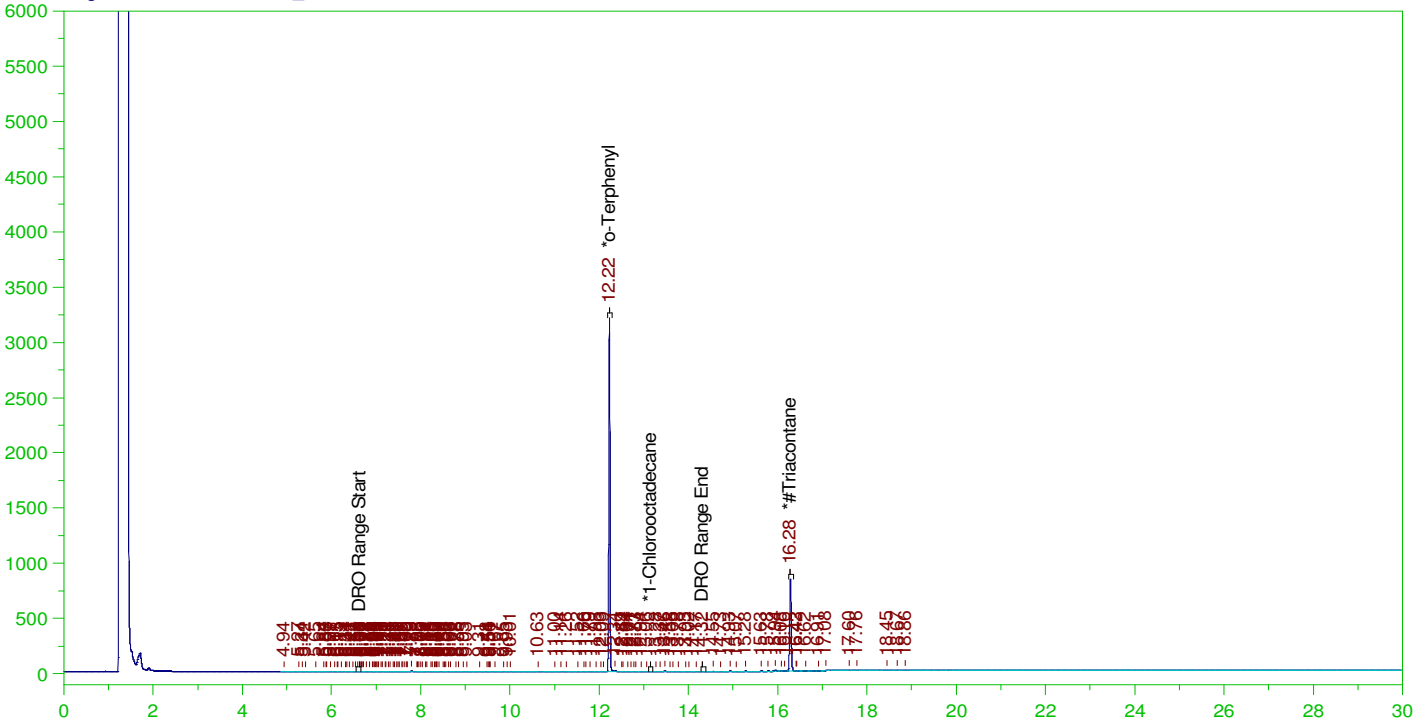
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.294	.476	.09	18.9	-

RRO Area:516378.8 RRO AMOUNT: 1.861107E-02

ERH2826 (RHMW08) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0011.RAW B22031470-011C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-011C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0011.RAW
Date & Time Acquired: 3/24/2022 1:55:29 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

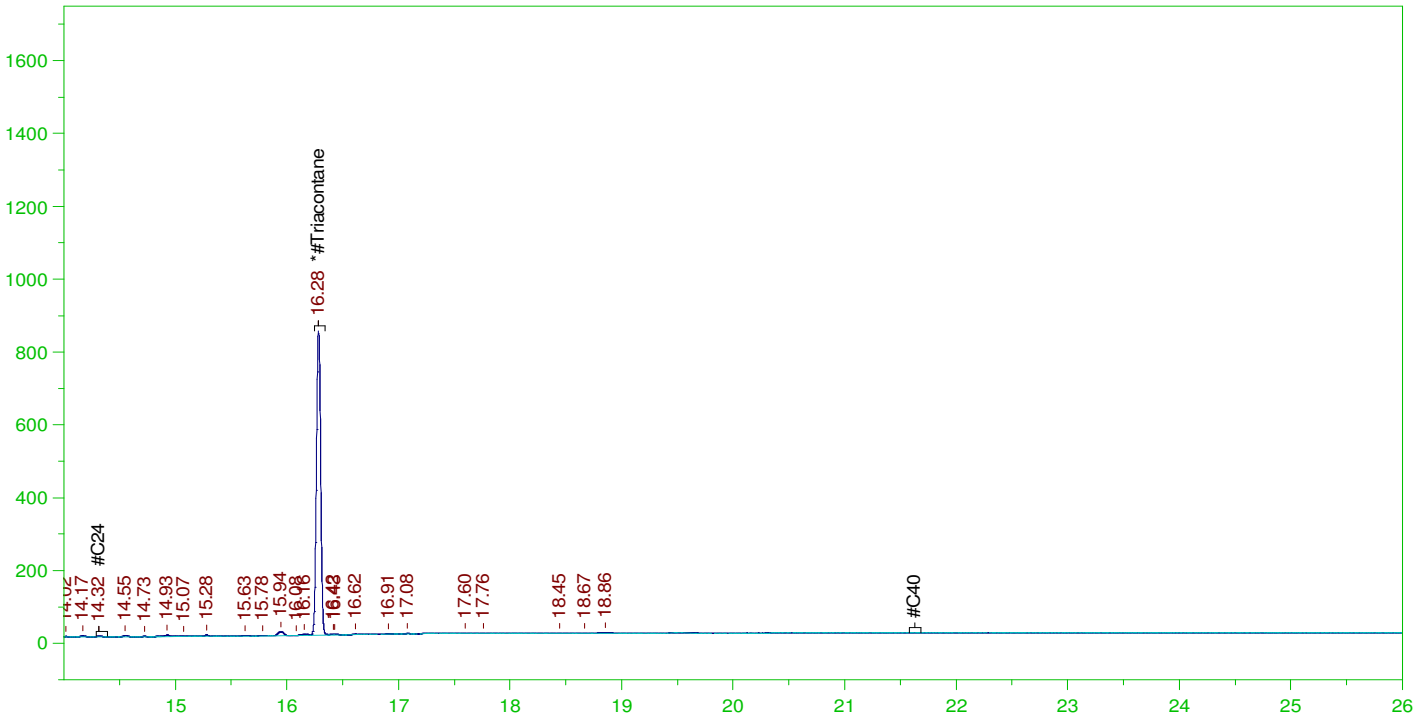
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.225	.19	.16	84.23	-
*1-Chlorooctadecane	29.973	.19	.	.	-
*#Triacontane	16.283	.19	.071	37.16	-

DRO Area:247267.2 DRO Amount: 7.207037E-03
TEH Area:438690.4 TEH Amount: 1.278641E-02

ERH2826 (RHMW08) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0011.RAW B22031470-011C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-011C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0011.RAW
Date & Time Acquired: 3/24/2022 1:55:29 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

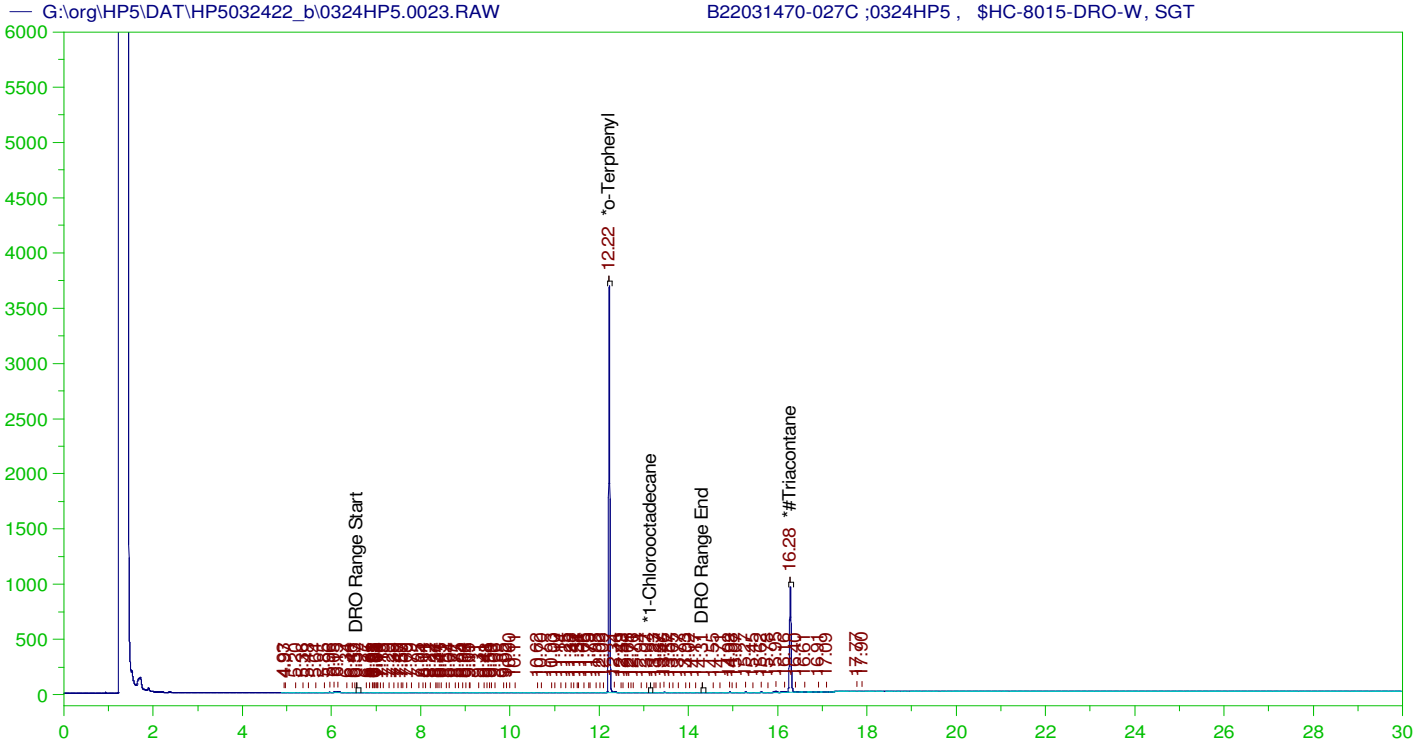
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.283	.476	.071	14.87	-

RRO Area:132800.8 RRO AMOUNT: 4.786343E-03

ERH2823 (OWDFMW07A) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0023.RAW B22031470-027C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-027C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0023.RAW
Date & Time Acquired: 3/24/2022 10:29:48 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

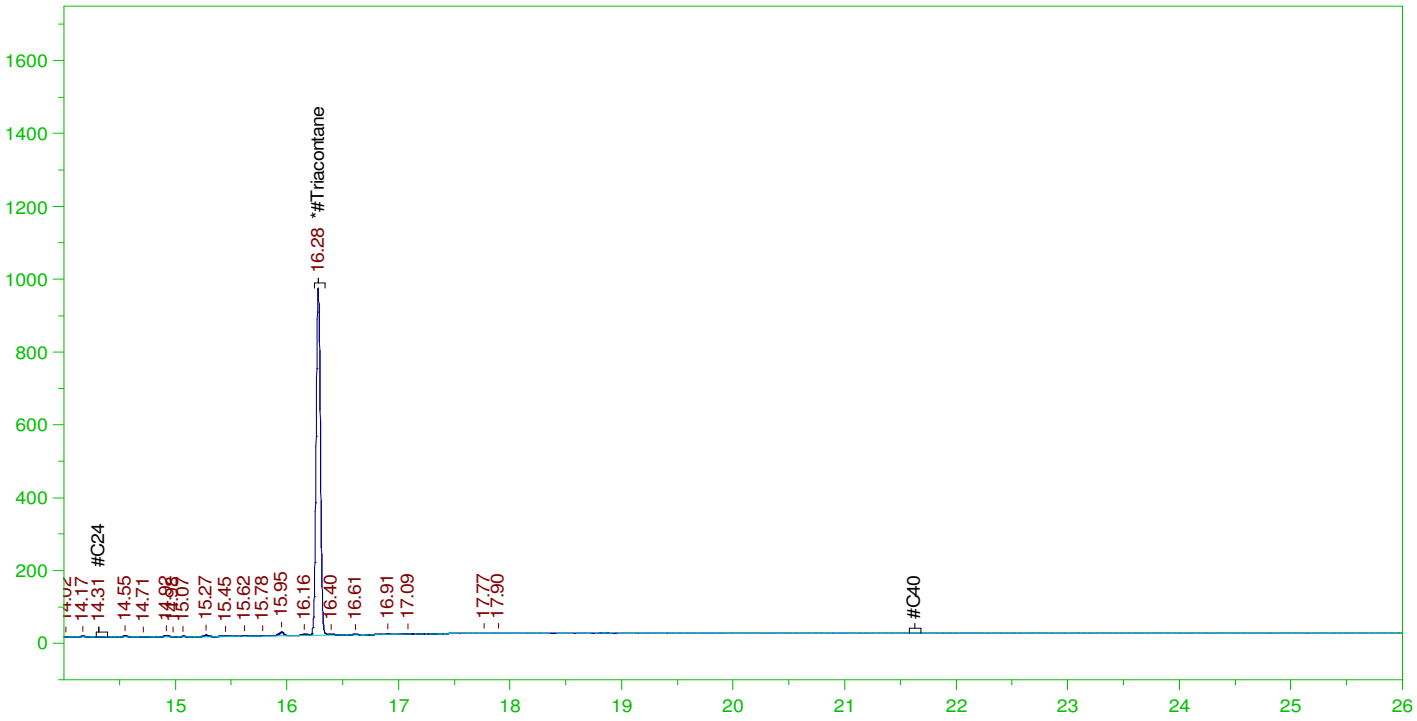
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.185	96.89	-
*1-Chlorooctadecane	29.989	.19	.	.	-
*#Triacontane	16.28	.19	.082	42.88	-

DRO Area:287340.4 DRO Amount: 8.375041E-03
TEH Area:559030.5 TEH Amount: 1.629393E-02

ERH2823 (OWDFMW07A) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0023.RAW B22031470-027C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-027C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0023.RAW
Date & Time Acquired: 3/24/2022 10:29:48 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

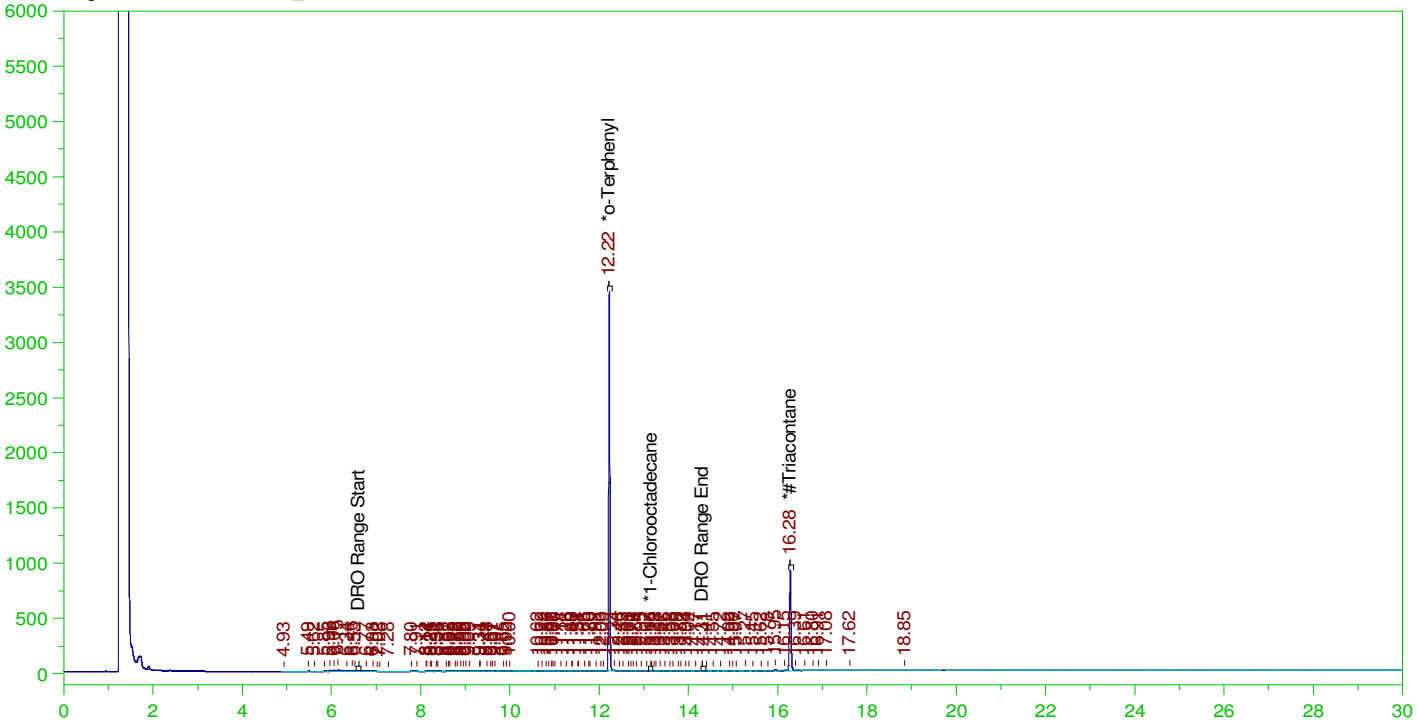
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.28	.476	.082	17.15	-

RRO Area:119373.6 RRO AMOUNT: 4.302406E-03

ERH2841 (RHMW09) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0027.RAW B22031470-032C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-032C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0027.RAW
Date & Time Acquired: 3/25/2022 1:22:09 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

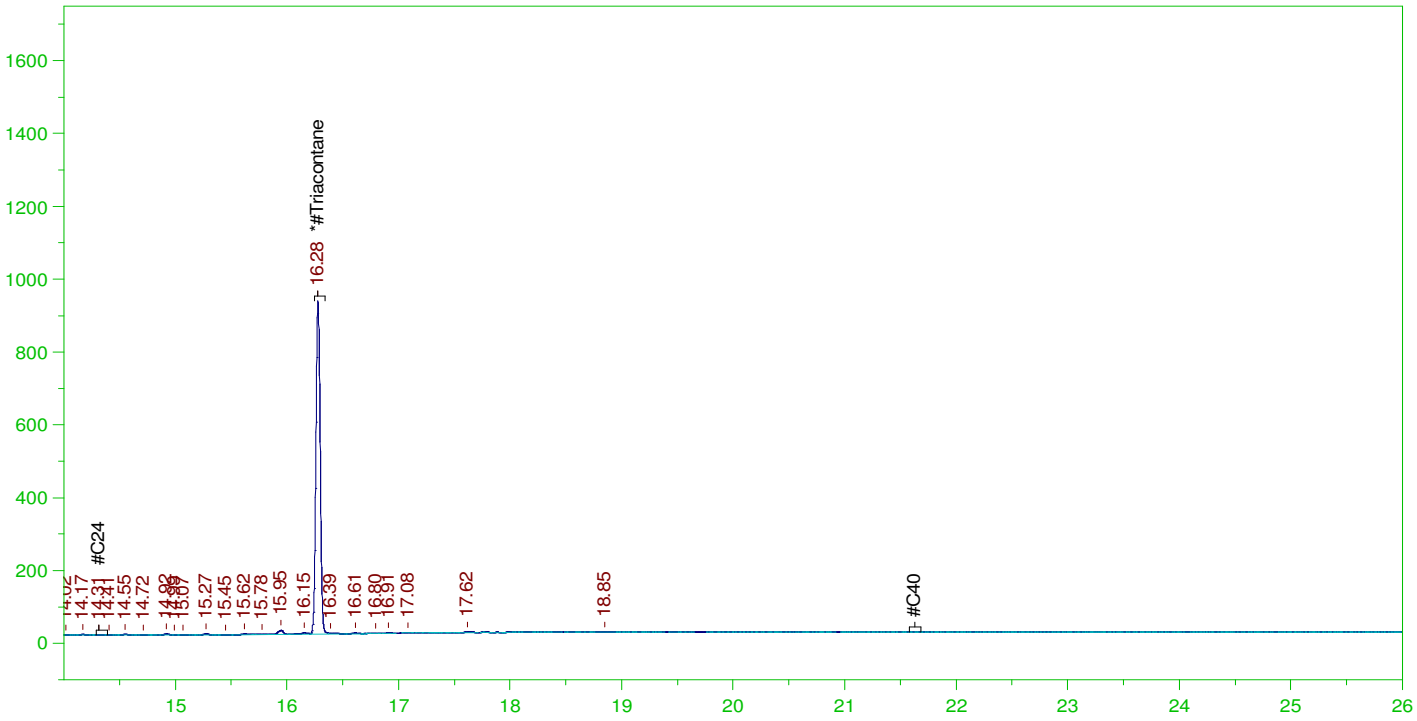
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.222	.19	.174	91.42	-
*1-Chlorooctadecane	13.163	.19	.	.01	-
*#Triacontane	16.278	.19	.078	41.1	-

DRO Area:251411 DRO Amount: 7.327818E-03
TEH Area:585549.9 TEH Amount: 1.706688E-02

ERH2841 (RHMW09) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0027.RAW B22031470-032C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-032C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0027.RAW
Date & Time Acquired: 3/25/2022 1:22:09 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

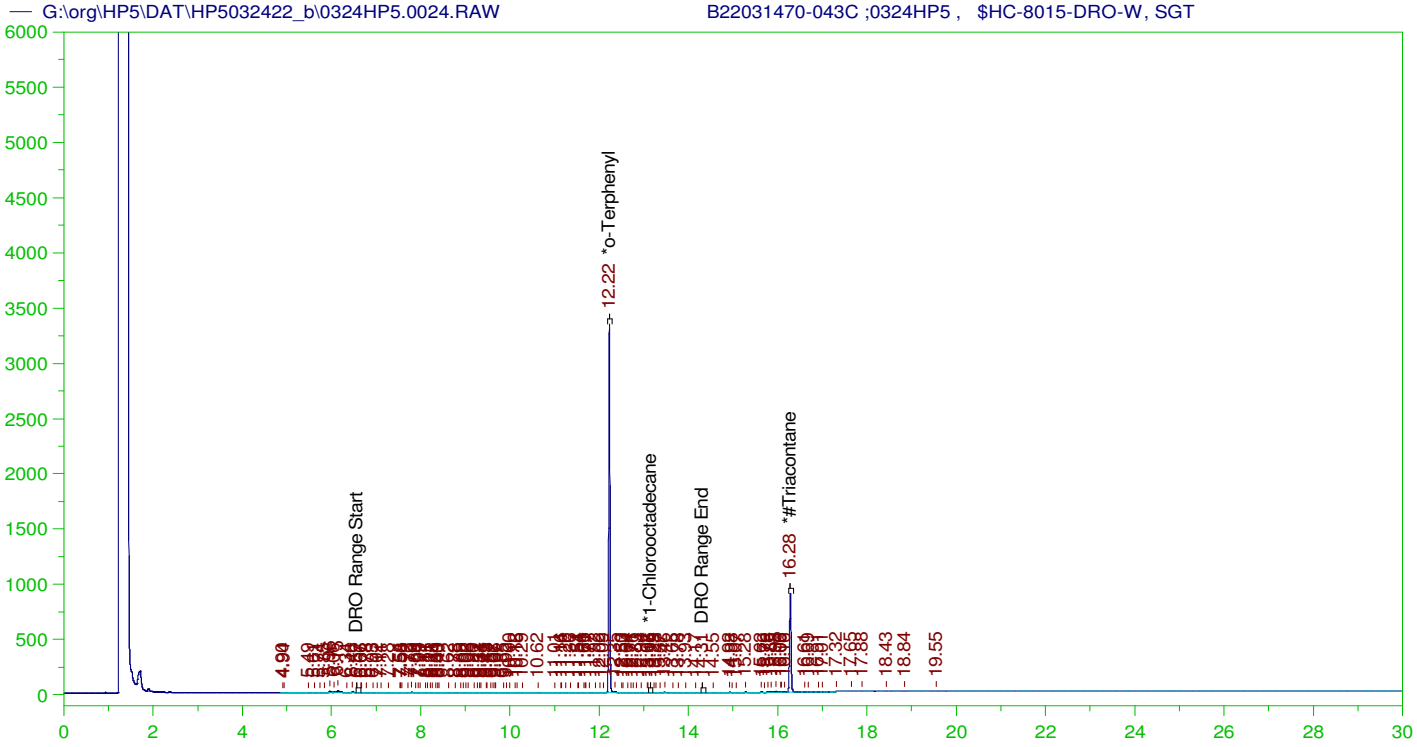
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.278	.476	.078	16.44	-

RRO Area:133216.9 RRO AMOUNT: 4.80134E-03

ERH2830 (OWDFMW05A) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0024.RAW B22031470-043C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-043C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0024.RAW
Date & Time Acquired: 3/24/2022 11:13:00 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

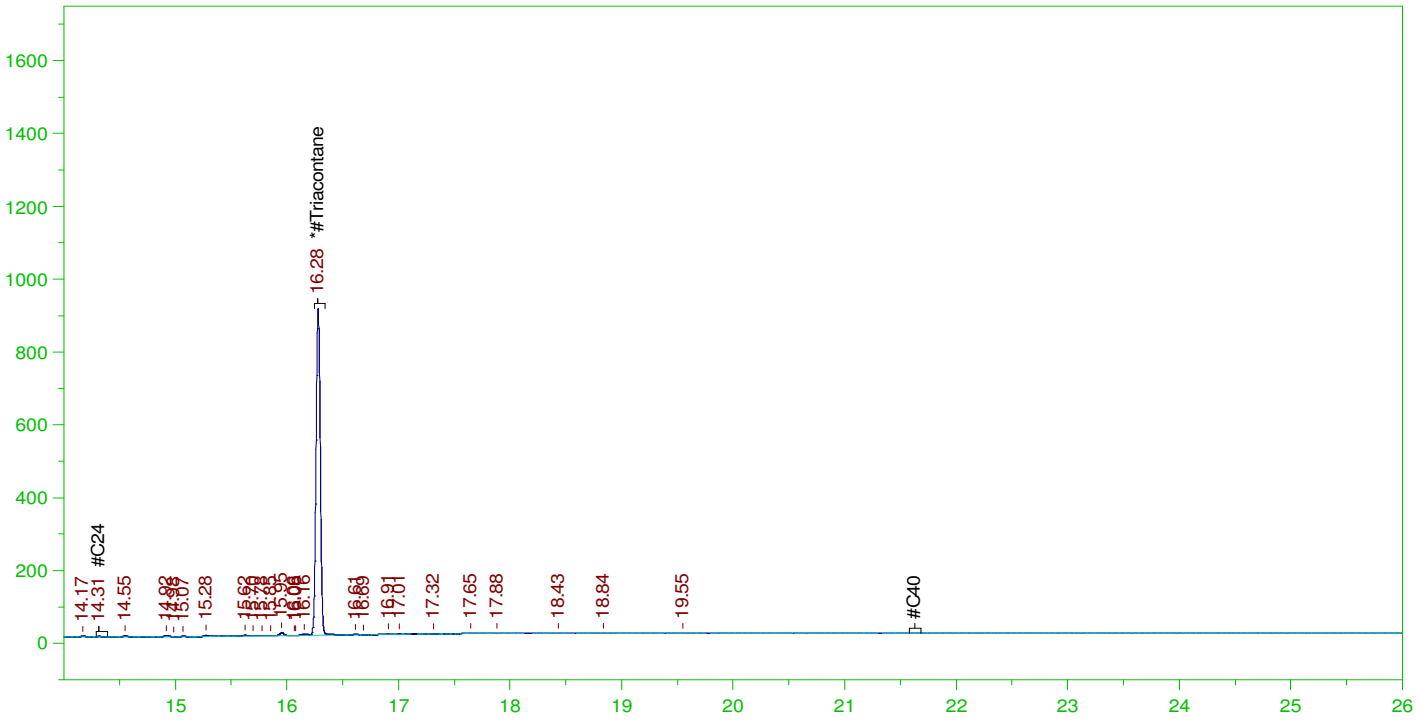
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.223	.19	.168	88.17	-
*1-Chlorooctadecane	13.158	.19	.	.01	-
*#Triacontane	16.28	.19	.076	40.1	-

DRO Area:278821.7 DRO Amount: 8.126749E-03
TEH Area:651563.6 TEH Amount: 1.899097E-02

ERH2830 (OWDFMW05A) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0024.RAW B22031470-043C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-043C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0024.RAW
Date & Time Acquired: 3/24/2022 11:13:00 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

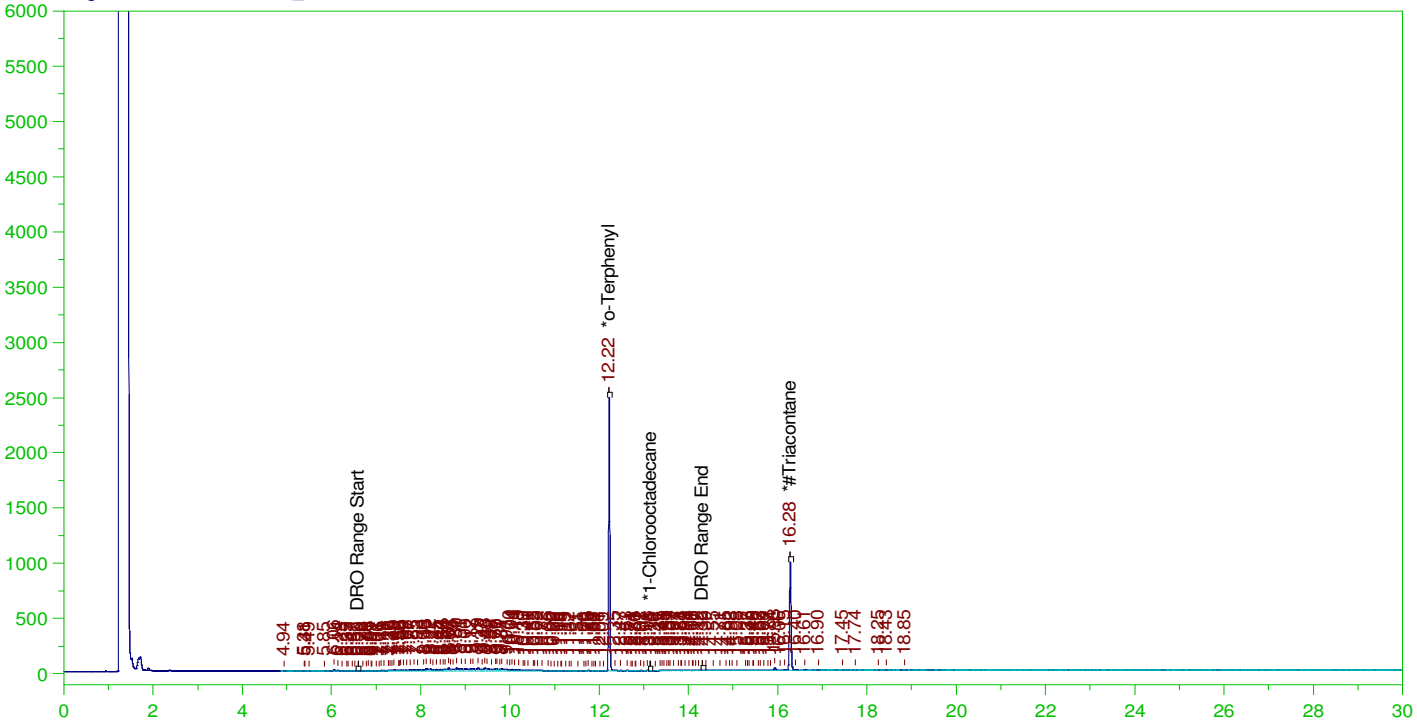
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.28	.476	.076	16.04	-

RRO Area:129403.6 RRO AMOUNT: 4.663901E-03

ERH2844 (RHMW2254-01 B) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0030.RAW B22031470-048C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-048C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0030.RAW
Date & Time Acquired: 3/25/2022 3:31:20 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

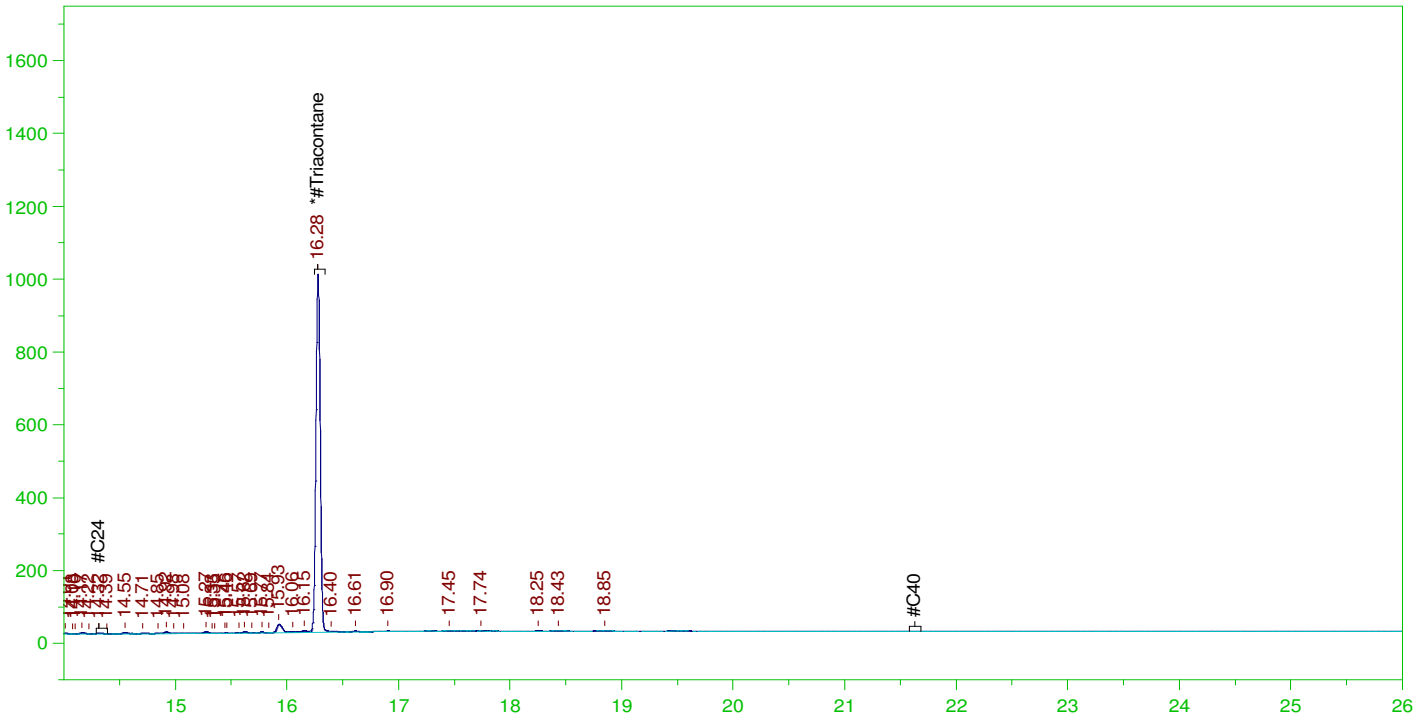
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.22	.194	.131	67.49	-
*1-Chlorooctadecane	13.154	.194	.	.01	-
*#Triacontane	16.279	.194	.085	43.98	-

DRO Area:3218579 DRO Amount: 9.563273E-02
TEH Area:3512919 TEH Amount: 0.1043784

ERH2844 (RHMW2254-01 B) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0030.RAW B22031470-048C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-048C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0030.RAW
Date & Time Acquired: 3/25/2022 3:31:20 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1030 Dilution: 1 S.A.: 1

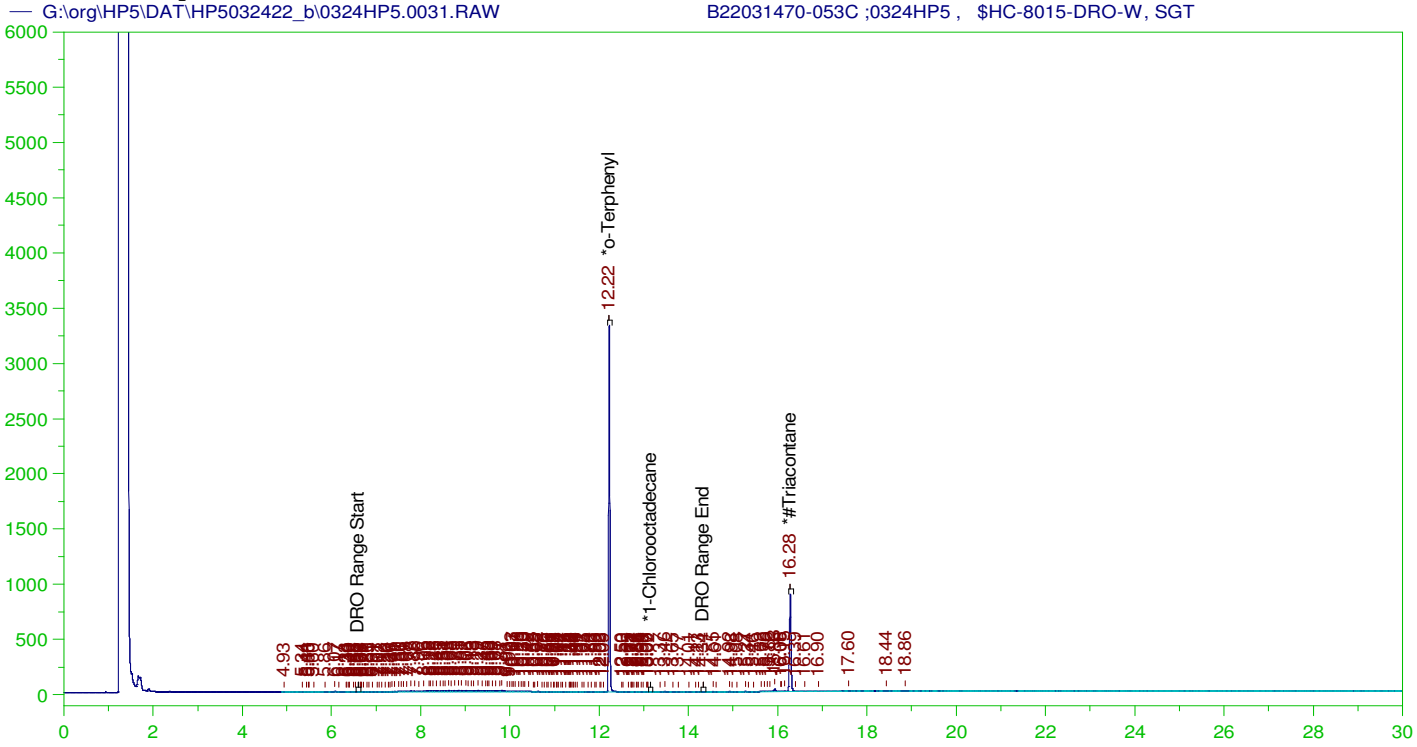
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.485	.085	17.59	-

RRO Area:181915 RRO AMOUNT: 6.683801E-03

ERH2850 (Sump Adit 3) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0031.RAW B22031470-053C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-053C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0031.RAW
Date & Time Acquired: 3/25/2022 4:14:20 AM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

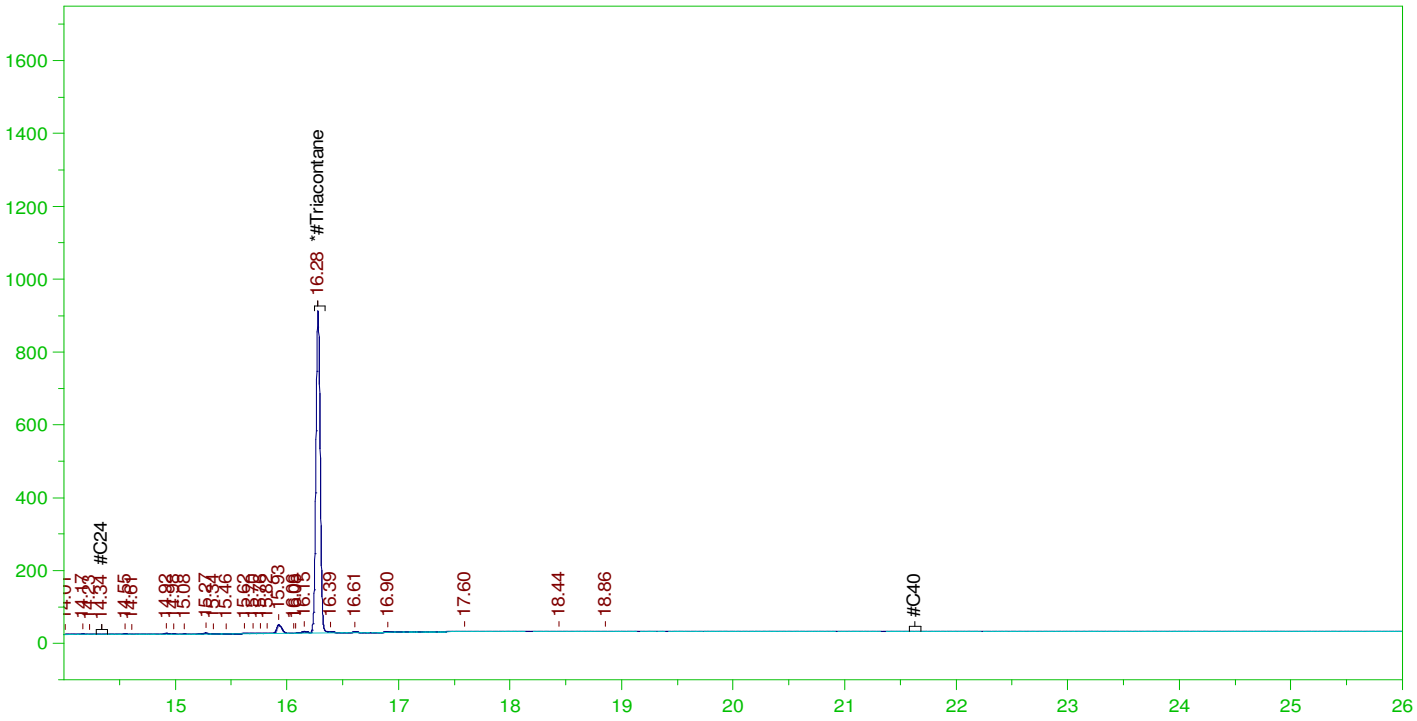
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.192	.172	89.5	-
*1-Chlorooctadecane	29.98	.192	.	.	-
*#Triacontane	16.279	.192	.076	39.31	-

DRO Area:2146743 DRO Amount: 6.317224E-02
TEH Area:2404672 TEH Amount: 7.076232E-02

ERH2850 (Sump Adit 3) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0031.RAW B22031470-053C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-053C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0031.RAW
Date & Time Acquired: 3/25/2022 4:14:20 AM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1040 Dilution: 1 S.A.: 1

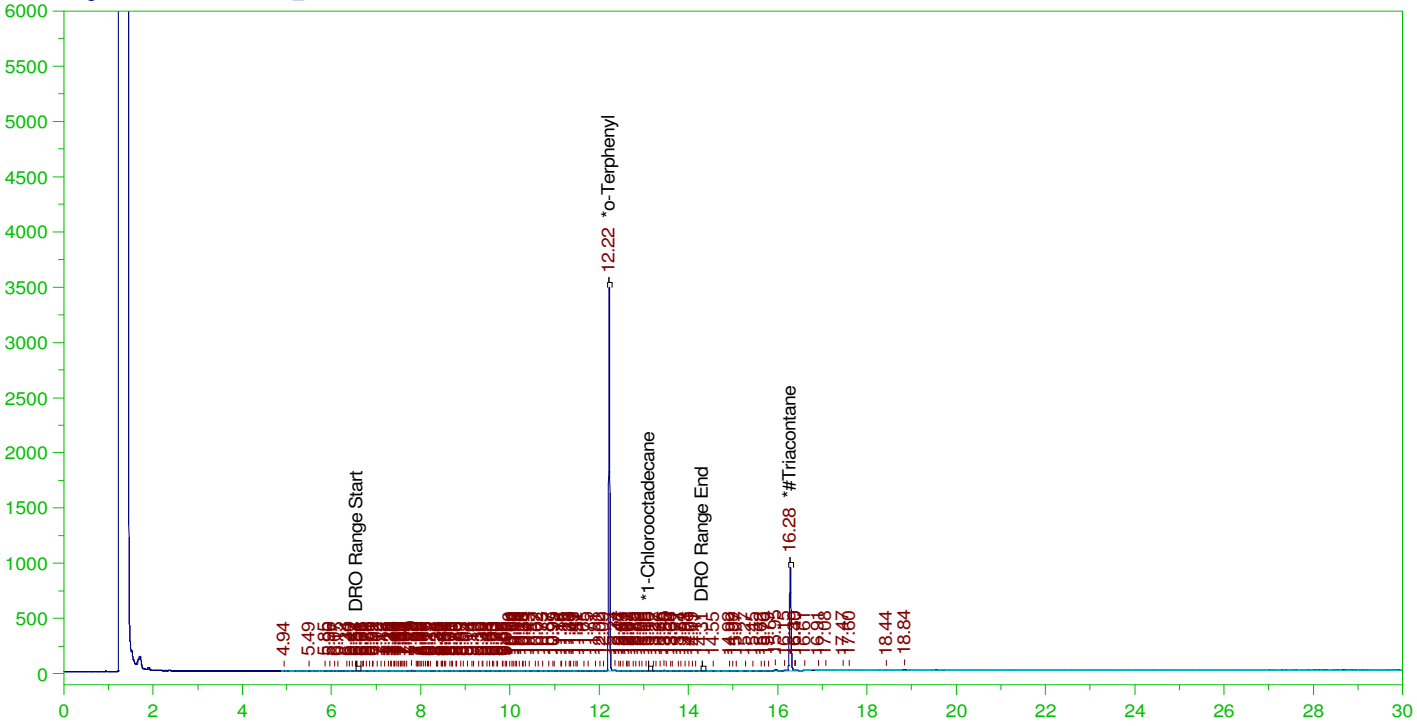
Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.481	.076	15.72	-

RRO Area:172841.5 RRO AMOUNT: 6.289367E-03

ERH2847 (RHMW2254-01 LF) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0025.RAW B22031470-058C ;0324HP5 , $HC-8015-DRO-W, SGT



DIESEL RANGE ORGANICS CHROMATOGRAM REPORT

Sample Name: B22031470-058C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0025.RAW
Date & Time Acquired: 3/24/2022 11:56:05 PM
Method File: G:\Org\HP5\Methods\DR_8015-C24T-JL-L%.met
Calibration File: G:\Org\HP5\Cals\SW8015C_DRO220111JL-C24-T.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

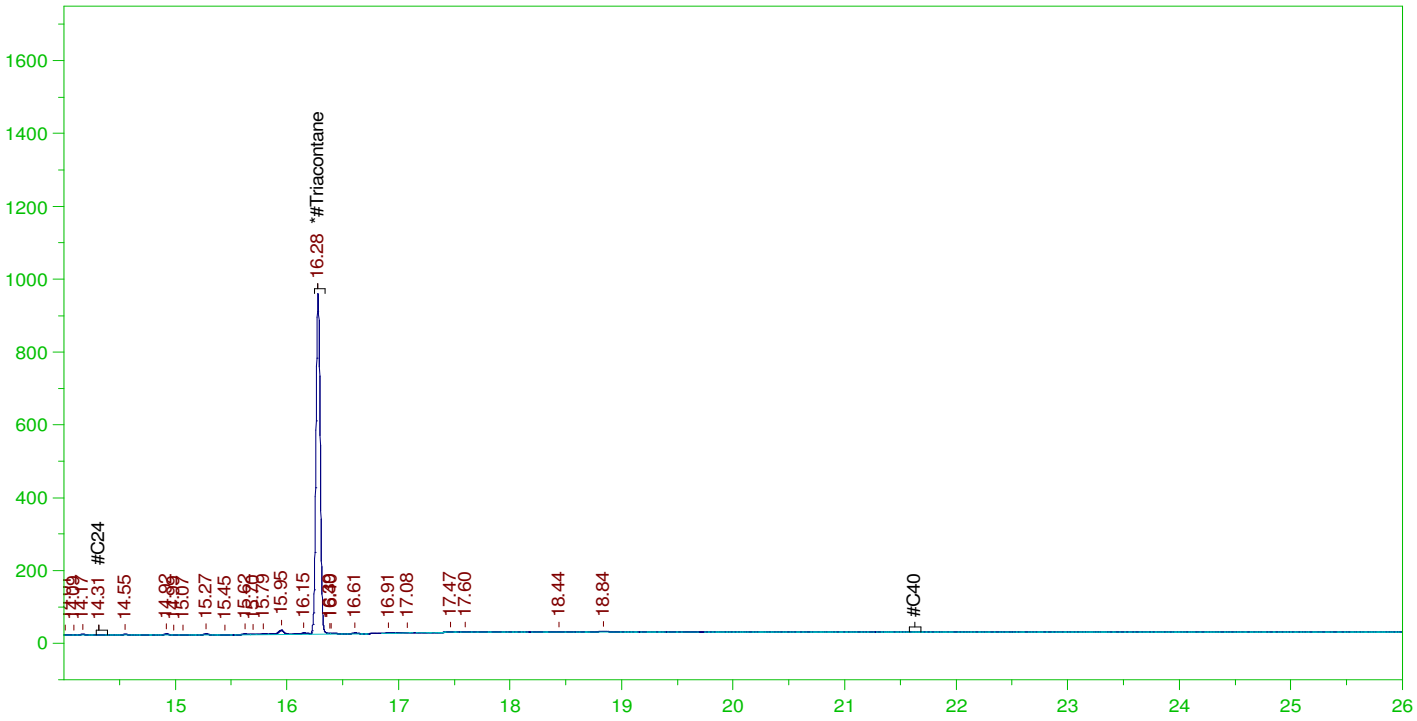
Mean RF for TEH: 32675.36
Rt range for Diesel Range Organics: 6.56 to 14.39

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*o-Terphenyl	12.221	.19	.174	91.2	-
*1-Chlorooctadecane	13.101	.19	.	.09	-
*#Triacontane	16.279	.19	.079	41.62	-

DRO Area:526278.8 DRO Amount: 1.533932E-02
TEH Area:749752.8 TEH Amount: 2.185287E-02

ERH2847 (RHMW2254-01 LF) Batch ID: 164697

G:\org\HP5\DAT\HP5032422_b\0324HP5.0025.RAW B22031470-058C ;0324HP5 , $HC-8015-DRO-W, SGT



RESIDUAL RANGE ORGANICS CHROMATOGRAM

Sample Name: B22031470-058C ;0324HP5 , $HC-8015-DRO-W, SGT
Raw File: G:\org\HP5\DAT\HP5032422_b\0324HP5.0025.RAW
Date & Time Acquired: 3/24/2022 11:56:05 PM
Method File: G:\Org\HP5\Methods\DR_OROS-BL-L%.MET
Calibration File: G:\Org\HP5\Cals\SW8015C_ORO220111BL_SAMP.CAL
Sample Weight: 1050 Dilution: 1 S.A.: 1

Mean RF for for Residual Range Organics Calculations: 26424.55
Rt range for Residual Range Organics: 14.29 to 21.68

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC	
*#Triacontane	16.279	.476	.079	16.65	-

RRO Area:152726 RRO AMOUNT: 5.504478E-03

From: Ramos, Alethea <alethea.ramos@aecom.com>
Sent: Monday, December 13, 2021 3:11 PM
To: Tabitha Edwards
Cc: Pascua, Margie; billingsPM@energylab.com
Subject: RE: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission

Categories: Must Attend

Hi Tabitha,

I believe Casper WY is DoD ELAP accredited in the TOC 9060 method. I spoke to Shari and she indicated there is a daily courier between Billings and Casper, and would be appx. a day delay. Under those stipulations, please subcontract these samples and inform on expedited TAT.

Thank you,

Alethea Ramos, CIH
Environmental Scientist, Environmental Health & Science, Environment
D +1-808-529-7283
M +1-808-389-5383
alethea.ramos@aecom.com

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From: Tabitha Edwards <tedwards@energylab.com>
Sent: Monday, December 13, 2021 7:05 AM
To: Ramos, Alethea <alethea.ramos@aecom.com>
Cc: Pascua, Margie <Margie.Pascua@aecom.com>; billingsPM@energylab.com
Subject: [EXTERNAL] FW: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission
Importance: High

Alethea,

The TOC by 9060 must be subcontracted to our office in Casper, WY. I need authorization from you to subcontract these. Once that has been received we will discuss the TAT with them and let you know what is achievable.

Thank you,

Energy Laboratories, Inc.
Trust our People. Trust our Data.

Tabitha Edwards | Office Manager | Billings, MT
O: 406-869-6286 | tedwards@energylab.com | www.energylab.com

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***We want to help you ship successfully**! Please plan ahead and allow extra time to receive supplies from the lab and for the lab to receive your samples. All carriers are in full-swing holiday peak season operating with double the volume and limited capacity. We appreciate your business so please contact your local branch or Project Manager to discuss adjustments to your shipping schedule or to ask questions.*

From: Ramos, Alethea [mailto:alethea.ramos@aecom.com]
Sent: Saturday, December 11, 2021 3:20 AM
To: Shari Endy; billingsPM@energylab.com
Cc: Jillian Miller; Pascua, Margie; KaaihiliChoy, Terri Ann
Subject: CV18F0126: Expedited NOI Groundwater Samples, Saturday 12/12 Submission
Importance: High

Hi Shari and Billings PM,

You will be receiving a Saturday shipment (12/12) of groundwater samples indicated in the attached COCs. We will need results by **Wednesday, December 15th**, and will pay any fees incurred for an expedited TAT. Please proceed with analysis without preservation traceability. Please see below tracking information links:

https://www.fedex.com/fedextrack/?trknbr=287337969629&trkqual=2459558000~287337969629~FX
https://www.fedex.com/fedextrack/?trknbr=287343101019&trkqual=2459559000~287343101019~FX

Thank you,

Alethea Ramos, CIH
Environmental Scientist, Environmental Health & Science, Environment
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M +1-808-389-5383
alethea.ramos@aecom.com

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